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N.B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Paper; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

EAST INDIA:

Progress and Condition:

271. Statement exhibiting the Moral and Material Progress and Condition of *India*, during the Year 1861-62, pursuant to Act 21 & 22 Vict. c. 106, s. 53:—Part I. *India* generally, *Bengal*, and *Madras* - - - - - - - - - p. 1

EAST INDIA (PROGRESS AND CONDITION).

STATEMENT

EHHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA,

DURING THE YEAR 1861-62.

India Office,
14 May 1863.

T. L. SECCOMBE,
Secretary, Financial Department.

(Presented pursuant to Act 21 *&* 22 *Vict. c.* 106, *s.* 53.*)*

PART I.

Ordered, by The House of Commons, *to be Printed,*
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STATEMENT exhibiting the MORAL and MATERIAL PROGRESS and CONDITION of *India*, during the Year 1861-62.

CHAPTER I.

NARRATIVE OF THE COURSE OF LEGISLATION,

During the Official Year 1861-62.

THE Report for this official year is divided into two parts: the first showing the course of legislation in the Legislative Council, and the second showing the subsequent course of legislation under the Indian Councils Act at meetings of the Council of the Governor General of India for the purpose of making laws and regulations. At the end of each division a list is given of pending Bills, showing the stages at which they had severally arrived at the time of the adjournments of the Councils.

The Acts passed by the Legislative Council from the 1st May 1861 to the date of its adjournment (16th November 1861) prior to its abolition, were Acts XII. to XXXIII. of 1861. They are noticed in numerical order.

Act XII. of 1861 (An Act to amend Act XLII. of 1860).

CHAP. I. Legislative Council.

One of the provisions of Act XLII. of 1860 (for the establishment of Courts of Small Causes beyond the local limits of the jurisdiction of the Supreme Courts of Judicature established by Royal Charter) precluded any Government from constituting any court a Court of Small Causes under that Act, so long as such court exercised any other civil jurisdiction. On a representation from the Lieutenant Governor of Bengal the present Act was passed for the removal of the restriction.

The Act empowers Local Governments to invest judges of Small Cause Courts with the powers of a principal sudder ameen within fixed limits; also with the powers of a magistrate; and with power to try suits under Act X. of 1859 (to amend the law relating to the recovery of rent in the Presidency of Fort William in Bengal).

It also provides for the appointment and removal of clerks of Courts of Small Causes, and prescribes the duties to be performed by those officers; authorizes Local Governments to appoint any court in a district in which there may be more than one court, the principal court in such district; provides that the judge of the principal court in a district may sit with the judge of any other court in the same district, for the trial of certain suits; and prescribes the procedure in such cases when the judges concur in decision, and when they differ. Lastly, it provides for the trial of suits cognizable by Small Cause Courts, which may be pending at the time of their constitution.

Act XIII. of 1861 (An Act to regulate temporarily the Procedure of the Police enrolled under Act V. of 1861, for the Regulation of Police).

This was a temporary Act to regulate the procedure of the police formed under Act V. of 1861, pending the passing of the new Code of Criminal Procedure. That code was subsequently passed on the 31st August 1861, and came into operation on the 1st January 1862, when this Act expired. The provisions of this Act were substantially the police sections of the Code of Criminal Procedure, which was then under consideration of the Council.

Act XIV. of 1861 (An Act to remove certain Tracts of Country in the Rohilcund Division from the Jurisdiction of the Tribunals established under the general Regulations and Acts).

The tracts affected by this Act lie in the Terai, on the north of the province of Rohilcund, skirting the Kumaon Hills. They are peculiar in character; swampy and uncultivated; calling for measures suited to the purpose of reclamation from a state of waste, for extensive works for surface drainage and irrigation, and for efforts to attract cultivators. The country is peopled, moreover, partly by migratory tribes in a primitive state, requiring a simple and patriarch form of administration.

It was represented by the Government of the North Western Provinces that the requirements of the country could not be met under the divided management of two or three different collectors burdened with other laborious duties; and that the gradual reclamation of the tract could only be hoped for from the introduction of a uniform system worked under the direction of a single officer.

This Act was, therefore, passed to meet the views of the Government of the North Western Provinces. The provisions are similar to those of Act XXII. of 1860 (to remove certain tracts on the eastern border of the Chittagong district from the jurisdiction of the tribunals established under the general Regulations and Acts), removing the districts from the jurisdiction of the courts of civil and criminal jurisdiction, and from the control of the ordinary offices of revenue, and from the system of procedure prescribed for those courts and offices, and vesting the administration in an officer or officers to act under the direction, control, and instructions of the Lieutenant Governor.

Act XV. of 1861 (An Act for the Levy of Port Dues in the Ports of the Concan).

This Act provides for the levy of port dues in the ports of the Concan, as required by Act XXII. of 1855 (the Port Dues Act). It is drawn like various other Acts, to authorize the levy of port dues in various parts under Act XXII. of 1855, limiting the amount to be charged.

Act XVI. of 1861 (An Act for licensing and regulating Stage Carriages).

This Act was passed with the view of putting a stop to the cruelties practised on the horses (generally undersized) employed in the service of the various dawk companies established for the conveyance of passengers to and from the Upper Provinces.

The Act defines the vehicles subject to its operation; prescribes rules for the issue of licenses; provides against the employment of carriages unsafe or unfit, and against overloading; provides the penalties for breach of its several enactments and for misconduct of drivers; defines the cases in which proprietors shall be liable for the penalties imposed; provides for the issue of summonses for the adjudication of penalties, for their recovery by distress, and for imprisonment in default of satisfaction by that means in cases of other than European British subjects. It also prescribes the procedure for recovery from European British subjects; and lastly, it excludes the Madras Presidency and the Straits Settlement from its operation, until extended thereto by the respective Local Governments.

Act XVII. of 1861 (An Act to amend Act XIV. of 1843, for regulating the Customs Duties in the North Western Provinces).

This Act was passed on the recommendation of the Lieutenant Governor of the North Western Provinces. It raises the duty on sugar and other saccharine produce exported from the North Western Provinces, and rendered dutiable by Act XIV. of 1843, as follows:—

On misree, kund, cheenee and all clayed and refined sugar, from eight annas per maund to one rupee per maund.

On goor, rab, sheerah and all unclayed and unrefined saccharine produce, from three annas per maund to six annas per maund.

It was expected that a considerable increase of revenue would be derived under this Act.

ACT XVIII. of 1861 (An Act for imposing a Duty on Arts, Trades and Dealings).

A Bill for the licensing of Arts, Trades and Professions was prepared and brought in by the late Right Honourable James Wilson simultaneously with the Income Tax Bill in March 1860. In June 1860 the Select Committee appointed to consider and report on the subject submitted an amended Bill, with an addition enumerating the professions placed under the obligation to take out licenses; a further provision for special licenses to be taken out by tobacco dealers, and a third investing collectors with powers of remission in the case of the poorest classes of persons liable to take out licenses. As settled in committee of the whole Council in September 1860, the measure took the title of "A Bill for imposing a Duty on Arts, Trades, and Dealings, and to require Dealers in Tobacco to take out a License."

It was then so limited as to exclude from its operation cultivators, labourers, professional persons and all but those exercising any lawful art, trade, or dealing for gain or profit and not subject to the income tax, also all dealers in tobacco.

This Bill was last before the Council in September 1860, and no steps were taken to carry it before the 31st July 1861. On that day Sir Bartle Frere, on behalf of the Government, stated that the condition and prospects of the revenue rendered it necessary to proceed with the Bill.

The Act exempted all persons paying income tax, and divided all other persons exercising any lawful art, trade, or dealing for gain or profit into three classes chargeable respectively with the annual duty of three rupees, two rupees, and one rupee.

ACT XIX. of 1861 (An Act to provide for a Government Paper Currency).

This Bill was originally introduced by the late Right Honourable James Wilson on the 3rd March 1860. The Select Committee on the Bill, in their report presented on the 16th February 1861, stated that "the leading features of the scheme consisted in the issue at various circles into which India was to be divided, and through the agency of an independent body of Commissioners, of a paper circulation of notes from 5 to 1,000 rupees, based on a reserve, partly of specie and partly of securities, in a proportion which might fluctuate from time to time, but was in no case to fall below that of one-third of specie to two-third of securities." But subsequently the Secretary of State communicated the opinion of the Home Government, that the principle ought to be the same as that adopted in England, of permitting issues of paper only against actual coin or bullion, with the exception of a certain limited amount to be defined by law, below which it might be reasonably supposed that the paper circulation could never fall. In this opinion the Select Committee concurred, considering the principle safer and more applicable to the circumstances of India. The Bill was accordingly amended by the Select Committee, and a section introduced providing that all issues of notes should be made against actual coin or bullion with the exception of an amount not exceeding four crores, which might be issued against securities. This fundamental change in the principle of the Bill led to corresponding amendments of detail.

An amendment was also introduced providing that the Government might, by special order, issue notes to a specified amount, not exceeding one-fourth of the total amount of issues represented by coin and bullion under this Act, in exchange for gold coin of the Government of India or for foreign gold coin or bullion to be computed at certain fixed rates.

The Act as finally passed on the 13th July 1861, in the form recommended by the Select Committee, provided that the lowest denomination of note issued under the Act should be ten rupees.

ACT XX. of 1861 (An Act to amend Act XXV. of 1858 for appointing Municipal Commissioners, and for raising a Fund for Municipal Purposes in the Town of Bombay).

This Act was passed on the recommendation of the Government of Bombay.

It provides for the removal, under certain circumstances, of the two municipal Commissioners appointed by the bench of justices, and for the levy of a town duty on bricks and tiles imported into Bombay. It authorises composition for limited periods for duties payable under Act XXV. of 1858, and gives authority to the municipal Commissioners to remit duties payable under that Act on articles re-exported, or which are the property of Government, or which are issued for the use of the Indian Navy or any other Government purpose.

Chap. I.
Legislative Council.

Act XXI. of 1861 (An Act for limiting in certain Cases, for the Year commencing from the 31st Day of July 1861, the Amount of Assessments to the Duties chargeable under Act XXXII. of 1860, for imposing Duties on Profits arising from Property, Professions, Trades and Offices; and Act XXXIX. of 1860, to amend Act XXXII. of 1860).

The object of this Act was to enable Government to dispense with fresh annual returns under the Income Tax Act. It was limited to the year commencing from the 31st July 1861. The power was reserved of calling for a return from any person who had made no return in the previous year, and the operation of the Act was confined to such parts of India only as it should be extended to by an order of the Governor General in Council.

Act XXII. of 1861 (An Act to amend Act III. of 1857 relating to Trespasses by Cattle).

This Act was passed to amend the Cattle Trespass Act. Its objects chiefly was to supply an omission in the 17th section in Act III. of 1857, which provided how a penalty might be adjudged, and how it might be recovered; but did not provide what the penalty should be, nor define the offence; and as the Penal Code, which under the provisions for mischief would meet the difficulty, was not to come into operation until the 1st January 1862, this Act was passed at a time when many complaints of cattle trespass were reaching the Government to meet the emergency. The power of seizing trespassing cattle was also given to persons who had made advances on the crops injured, or to whom the crops had been sold or mortgaged. Representations were made to the Council that the Act should provide for the levy of fines on the villages to which the owners of the cattle belonged; but this provision was not recommended by the Select Committee, or adopted by the Council.

Act XXIII. of 1861 (An Act to amend Act VIII. of 1859 for simplifying the the Procedure of the Courts of Civil Judicature not established by Royal Charter).

This Act embodied, and therefore repealed, two former minor Acts for the amendment of the Code of Civil Procedure; viz., Acts IV. and XLIII. of 1860; but it was not designed to be a general revision of that code. Its object was simply to make such amendments as seemed to be immediately required. The Act provides for the costs of the serving process, for the procedure when a court should see that it had no jurisdiction in a case in which a plaint had been filed; for cases in which there were more defendants than one, and all the defendants did not reside within the jurisdiction of the court in which the suit was brought; for cases wherein it was discoyered that the usual notice had not been served on the defendant in consequence of the plaintiff failing to deposit costs for issuing it; and for cases of application for discharge by a person arrested in execution of a decree for money. It gives power to a court to summon witnesses of its own accord, and regulates the procedure ere questions regarding the amount of mesne profits and sums alleged to have been paid in satisfaction of decrees.

In suits of the nature and amount cognizable by Small Cause Courts, it provides for immediate execution on the verbal application of the judgment creditor. It provides for the procedure in certain offences under Chapter XI. of the Penal Code, and in certain cases of contempt under that code. It amends the provision of the Code of Civil Procedure in respect of appeals, and also of reference to the Sudder Court, and provides for limitations or restrictions of the code if extended to non-regulation provinces.

Act XXIV. of 1861 (An Act to enable the Banks of Bengal, Madras, and Bombay to enter into arrangements with the Government for managing the issue, payment and exchange of Government Currency Notes and certain Business hitherto transacted by the Government Treasuries).

The object of this Act was simply to authorise the banks of Bengal, Madras and Bombay to enter into agreements with the Government for superintending, managing, and becoming agents for the Government currency notes, and also for transacting the business of Government, which had usually been conducted at the public treasuries.

Act XXV. of 1861 (An Act for simplifying the Procedure of the Courts of Criminal Judicature not established by Royal Charter).

This important measure was first introduced to the Council on the 24th January 1857, in four separate Bills, for Bengal, Madras, and Bombay, and the North Western Provinces, to give effect to the Code of Criminal Procedure prepared by the Commissioners appointed by Her Majesty to consider the reform of the judicial establishments, judicial procedure, and laws of India. Subsequently the select committees appointed on these Bills presented to the Council on the 30th April 1859, a joint report, accompanied by three Bills, viz.:

1. A Bill for simplifying the procedure of the courts of criminal judicature not established by Royal charter.
2. A Bill to constitute courts of civil judicature.
3. A Bill to constitute courts of criminal judicature.

The first of these embodied (with amendments) the four Bills previously submitted to the Council. It passed through a committee of the whole Council on the 14th September 1859; and a committee having been appointed to revise it with special reference to the amendments introduced into the penal code, and certain despatches from the Secretary of State on trials by jury and appeals, and the minutes of the judges of the Nazamut Adawlut of the North Western Provinces on the subject of police investigations, that committee reported on the 2d of March 1861. The Bill again went through committee of the whole Council, and was finally passed on the 31st August of that year.

The Act contains a complete code of procedure, defining the jurisdiction of criminal courts; the mode of compelling the attendance of defendants and witnesses; the powers of the police, the modes of investigation and trial of cases by magistrates and courts of session, and fully provide for subjects such as security to keep the peace or for good behaviour, the abatement of local nuisances, the maintenance of wives and children, disputes relating to the possession of land, the custody and trial of lunatics, the constitution and duties of juries, and the powers of the Sudder Court, and appeals. It also provides an Appendix of forms and a Schedule, embodying the practical directions of the code.

Act XXVI. of 1861 (An Act to regulate the Occupation of Land in the Settlement of Malacca).

At the time of the cession of Malacca to the British Government, in 1825, it was found to be held by individuals under old grants from the Dutch Government, which entitled the grantees to levy for the cultivators of the soil one-tenth of the produce. The object of Government was to redeem the rights acquired under these grants, so as to obtain full power to deal with the land.

Certain payments were therefore made to the grantees; but a provision was made that if ever Malacca should be transferred to another State, the Government would replace the grantees in their former position. On this certain doubts had arisen as to the powers of the Government. This Act, while it provides for compensation to persons interested under the grants in the event of any change in the sovereignty of the country, declares the lands to be vested absolutely in Her Majesty. The Act provides for the payment, from lands held by prescription of one-tenth of the produce to Government, and also provides for grants of leases of lands, claims to waste lands, surveys and measurements, and the adjudication of cases of disputed possession.

Act XXVII. of 1861 (An Act to regulate the Administration of Port Blair and other Settlements in the Andaman Islands.)

The object of this Act was to provide for the administration of civil and criminal justice in the Andaman, and the establishment of such regulations as are necessary for the discipline and security of a penal settlement. No person is allowed to land, or to land goods without a license; power is given for the inspection of vessels visiting the port; and a penalty is provided for receiving on board any escaped convict.

ACT XXVIII. of 1861 (An Act to extend the Provisions of Act I. of 1859 for the Amendment of the Law relating to Merchant Seamen).

A difficulty having arisen at Aden respecting the powers of the judicial officers there to inquire into charges of incompetency or misconduct on the part of masters or mates of ships, and as to shipwrecks, this Act was passed to extend the provisions of the Merchant Seamen's Act I, of 1859, and authorises all courts having Admiralty jurisdiction in India and the principal criminal court in ports where there is no court having Admiralty jurisdiction, to inquire into the cases mentioned, by whatever authority the certificate of the masters or mates may have been granted.

ACT XXIX. of 1861 (An Act to consolidate and amend the Articles of War for the Government of the Native Officers and Soldiers in Her Majesty's Indian Army.)

In this revision of the articles of war for the native army many previous Acts were repealed.

The object in view was to simplify the articles, and to increase the power of commanding officers. A large number of verbal amendments were made by the Act in the former articles, and to these the assent of the military authorities was given.

ACT XXX. of 1861 (An Act to enable the Bengal Military Orphan Society to register under Act XXXI. of 1860, for the Registration of Literary, Scientific and Charitable Societies).

This Act was passed simply to enable the Bengal Military Orphan Society to register, under Act XXI. of 1860 (for the registration of literary, scientific and charitable institutions).

ACT XXXI. of 1861 (An Act to regulate the Manufacture of Saltpetre and the Sale of Salt educed in the Refinement thereof.)

The manufacture of saltpetre was not under regulation by law; but the same liberty did not exist in respect of salt which might be educed in the manufacture of saltpetre. The object of this Act was to license the manufacture of saltpetre, and to turn to profitable account the salt produced in the process. The Act was passed for the North Western Provinces, and might be extended to other parts of India. It provides penalties for violations of the Act, and provides for searches, and for the destruction of the works of offenders.

ACT XXXII. of 1861 (An Act to postpone the Operation of a Portion of Clause 8, Section I. of Act XIV. of 1859, to provide for the Limitation of Suits).

Clause VIII. of Section I. of Act XIV. of 1859 limited the period for the commencement of suits for the amount of Bills for articles sold by retail to three years from the time the cause of action arose.

By Act XI. of 1861 the operation of this provision was, on the representation of the Calcutta Trades Association, postponed to the 1st January 1862, and the Act under notice further postponed it to the 1st July 1862.

ACT XXXIII. of 1861 (An Act to amend the Schedule annexed to the Code of Criminal Procedure).

This was the last Act passed by the Legislative Council. It was rendered necessary by the discovery that the jurisdiction under the schedule of the code of criminal procedure would have been limited in all cases of theft, and all cases of lurking, house-trespass or house-breaking by night, however trifling, to the Court of Session or the magistrate of a district. This Act altered the words in respect of theft "to the Court of Session or any magistrate," and in the other case "to the Court of Session or magistrate of the district, or subordinate magistrate of the first class."

CHAP. I.
Legislative Council.

LIST of BILLS and other Business pending before the LEGISLATIVE COUNCIL of *India*, at the date of its last adjournment, the 16th November 1861.

1	Bill to repeal Act IV. of 1840, and to amend the law for giving relief in cases of forcible dispossession within the Presidency of Fort William in Bengal.	After a first and second reading this Bill was referred to a Select Committee, who presented their report on the 17th March 1855.
2	Bill to amend the law relating to the sale of under-tenures.	This Bill stands as settled in Committee of the whole Council on the 31st May 186, after having been read a first and second time, and referred to, and reported on by, a Select Committee.
3	Bill to amend the law relating to the emigration of native inhabitants of India to the Island of Mauritius and other places.	After a first and second reading this Bill was referred to a Select Committee, who presented their report on the 10th March 1860.
4	Bill to extend Act XXIII. of 1840 (for executing within the local limits of the jurisdiction of Her Majesty's Courts legal process issued by authorities in the Mofussil).	This Bill (after having been read a first and second time, and referred to, and reported on by, a Select Committee) was settled in Committee of the whole Council on the 10th August 1861, and ordered to be republished for six weeks.
5	Bill to provide for the Registration of Assurances.	This Bill, after being read a first and second time, was referred to a Select Committee; who presented their report on the 10th August 1861.
6	Bill to amend Act X. of 1859 (to amend the law relating to the recovery of rent in the Presidency of Fort William in Bengal).	This Bill, after being read a first and second time, was referred to a Select Committee who presented their report on the 17th August 1861.
7	Bill to enlarge the jurisdiction of the courts of requests in the settlement of Prince of Wales Island, Singapore, and Malacca.	This Bill (after having been read a first and second time, and referred to, and reported on by, a Select Committee) was settled in Committee of the whole Council on the 31st August 1861, and ordered to be republished for two months.
8	Bill for regulating public conveyances in cities and towns in British India.	This Bill, after being read a first and second time, was referred to a Select Committee, whose report was presented on the 24th August 1861, and the Bill, as amended, was ordered to be republished for two months.
9	Bill to provide for the dissolution of certain marriages entered into by Christian converts before their conversion.	Read a first time on the 31st December 1859.
10	Bill to provide for the imposition of a tax on tobacco and pawn in the districts subordinate to the Government of Bengal.	Read a first time on the 7th September 1861.
11	Project of a law for the better preservation of the public peace of the island of Singapore and the places subordinate thereto.	Referred to a Select Committee on the 17th February 1855.
12	Question of a municipal law for the conservancy of towns in the territories under the Government of the East India Company.	Referred to a Select Committee on the 10th March 1855.
13	Bill to amend the law relating to affidavits, affirmations, and solemn declarations.	This Bill, after being read a first and second time, was referred to a Select Committee on the 21st June 1856.
14	Question of enabling the Legislative Council to call for evidence.	Referred to a Select Committee on the 20th September 1856.
15	Petition of the European banking institutions in Calcutta, praying for the passing of an Act securing to the banks of this country similar protection to that afforded to bankers in the United Kingdom by the statute 16 & 17 Vict. c. 59, s. 19.	Referred to a Select Committee on the 15th November 1856.
16	Bill for the prevention of fraudulent transfers of property and of secret trusts.	This Bill, after being read a first and second time, was referred to a Select Committee on the 29th January 1859.

CHAP. I.
Legislative Council.

LIST of BILLS, &c. pending before the LEGISLATIVE COUNCIL of *India*, &c.—*continued.*

17	Bill to regulate the appointment, employment, and dismissal of village watchmen in the territories under the government of the Lieutenant Governor of Bengal.	This Bill, after being read a first and second time, was referred to a Select Committee on the 2d April 1859.
18	Bill for regulating the establishment of markets.	This Bill, after being read a first and second time, was referred to a Select Committee on the 23d April 1859.
19	Bill to provide for better supplying with water the town and suburbs of Kurrachee.	This Bill, after being read a first and second time, was referred to a Select Committee on the 20th August 1859.
20	Bill to provide for the good order and discipline of the battalions of military police.	This Bill, after being read a first and second time, was referred to a Select Committee on the 24th December 1859.
21	Bill to repeal Regulation XIX. of 1810 of the Bengal Code, and Regulation VII. of 1817 of the Madras Code.	This Bill, after being read a first and second time, was referred to a Select Committee on the 28th April 1860.
22	Bill for facilitating arrangements between debtors and creditors.	This Bill, after being read a first and second time, was referred to a Select Committee on the 21st July 1860.
23	Bill for extending certain provisions of Acts XIV. and XXV. of 1856 to the town and suburbs of Rangoon, and to the towns of Moulmein, Tavoy, and Mergui, and for appointing municipal commissioners, and for levying rates and taxes in the said towns.	This Bill, after being read a first and second time, was referred to a Select Committee on the 19th January 1861.
24	Bill for the preservation of property recovered from wrecked boats.	This Bill was read a first and second time, and after being referred to and reported on by a Select Committee, came under the consideration of the Committee of the whole Council on the 2d March 1861, when it was referred back to the Select Committee.
25	Bill to provide for the punishment of breach of contract for the cultivation, production, gathering, provision, manufacture, carriage, and delivery of agricultural produce.	This Bill, after being read a first and second time, was referred to a Select Committee on the 16th March 1861.
26	Bill to provide for the registration and for the better enforcement of engagements for the cultivation and delivery of agricultural produce.	This Bill, after being read a first and second time, was referred to a Select Committee on the 31st March 1861.
27	Bill to constitute courts of civil judicature	These Bills, as prepared by the Select Committee on the Code of Criminal Procedure, were referred back to a Select Committee on the 13th April 1861.
28	Bill to constitute courts of criminal judicature	
29	Bill for securing certain grants of immoveable property made by the State.	This Bill, after being read a first and second time, was referred to a Select Committee on the 27th April 1861.
30	Bill to facilitate the adjustment of unsettled claims to exemption from the payment of Government Land Revenue in the Presidency of Bombay, exclusive of Scinde, and to regulate the succession to and transfer of lands, wholly or partially exempt from the payment of such revenue.	This Bill, after being read a first and second time, was referred to a Select Committee on the 6th July 1861.
31	Bill to amend the law relating to the use of a Government seal.	This Bill, after being read a first and second time, was referred to a Select Committee on the 6th July 1861.
32	Bill relating to emigration to the British Colonial dependency of Seychelles.	This Bill, after being read a first and second time, was referred to a Select Committee on the 13th July 1861.
33	Bill to provide for the construction, by companies and by private persons, of branch railways, iron tramroads, common roads, or canals, as feeders to public railways.	This Bill, after being read a first and second time, was referred to a Select Committee on the 13th July 1861.
34	Bill for the consolidation and amendment of the laws relating to the collection of customs duties.	This Bill, after being read a first and second time, was referred to a Select Committee on the 20th July 1861.
35	Bill for the better enforcement of discipline in the house of correction at Calcutta.	This Bill, after being read a first and second time, was referred to a Select Committee on the 27th July 1861.

Chap. I.
Legislative Council.

List of Bills, &c. pending before the Legislative Council of *India*, &c.—*continued.*

36	Bill to repeal certain Regulations and Acts relating to Criminal Law and Procedure.	This Bill, after being read a first and second time, was referred to a Select Committee on the 31st August 1861.
37	Bill for the registration of Nijjote and Khamar and other such lands as well as of Ryottee tenures involving the immediate occupation of the soil for the purposes of cultivation or for other purposes.	This Bill, after being read a first and second time, was referred to a Select Committee on the 31st August 1861.
38	Bill to amend Act XIV. of 1859 (to provide for the limitation of suits).	This Bill, after being read a first and second time, was referred to a Select Committee on the 7th September 1861.
39	Bill further to amend Act XXXVI. of 1860 (to consolidate and amend the law relating to stamp duties).	This Bill, after being read a first and second time, was referred to a Select Committee on the 7th September 1861.
40	Bill to improve the system of zemindary dawks in the provinces subject to the Government of Bengal.	This Bill, after being read a first and second time, was referred to a Select Committee on the 7th September 1861.
41	Proposed amendment of the law relating to judicial oaths and affirmations.	The papers on this subject have been printed.
42	Petition of inhabitants of New South Wales, praying that encouragement may be given to the emigration of labourers from the Indian ports to that Colony.	Ordered to be printed on the 23d September 1854.
43	Petition of the inhabitants of Agra, praying for the passing of an Act for the Civil Registration of children born in India.	Ordered to be printed on the 6th December 1856.
44	Petition of inhabitants of Bangalore on the same subject.	Ordered to be printed on the 24th January 1857.
45	Petition of Protestant missionaries in and near Calcutta for a law to suppress the cruelties practised at the Churruck Poojah.	Ordered to be printed on the 9th October 1858.
46	Communication from the Straits Government regarding the abolition of the office of Coroner in that settlement, or its limitation to the precincts of the towns only of the several stations.	Ordered to be printed on the 27th November 1858.
47	Correspondence between the Foreign Department and the Bombay Government on the subject of prohibiting the exportation of pig lead.	Ordered to be printed on the 5th March 1859.
48	Despatch from the Secretary of State for India, relative to the rights of British subjects not in the service of Her Majesty to enter the territories under Her dominion and those under the rule of the Native Princes of India.	Ordered to be printed on the 30th April 1859.
49	Communications from the Bombay Government, on the necessity of making adequate legal provision for the administration of justice at Aden.	Ordered to be printed on the 3d September and 3d December 1859.
50	Communication from the Home Department, relative to the necessity of raising the maximum of the municipal rates and taxes at Singapore.	Ordered to be printed on the 3d December 1859.
51	Communication from the Bengal Government, on the subject of the law relating to the claims of native Christian converts upon their families detained by their heathen relatives.	Ordered to be printed on the 3d December 1859.
52	Communication from the Straits Government, relative to a proposed imposition of a tax upon dogs throughout that settlement.	Ordered to be printed on the 3d December 1859.
53	Communication from the Military Department, regarding the expediency of passing an Act empowering cantonment magistrates at stations where there are European troops to expel all persons considered unfit to remain therein.	Ordered to be printed on the 3d December 1859.

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Legislative Council.

List of Bills, &c. pending before the Legislative Council of *India*, &c.—*continued.*

54	Communication from the Straits Government, suggesting extension to that settlement (with necessary modification) of Act I. of 1847 (for the establishment and maintenance of boundary marks in the North-Western Provinces of Bengal).	Ordered to be printed on the 7th January 1860.
55	Papers relative to the English Merchant Shipping Act of 1854.	Ordered to be printed on the 6th November 1858, and 4th February 1860.
56	Petition from the Calcutta Trades Association, on the subject of a law regarding masters and servants.	Ordered to be printed on the 4th August 1860.
57	Petition from Lall Chand Mookerjee and others, praying for a divorce law affecting native Christians.	Ordered to be printed on the 18th August 1860.
58	Petition from certain proprietors and lessees of rum distilleries in the vicinity of Calcutta, and in Jessore, praying for a reduction of the present rates of duty upon the manufacture and exportation of rum.	Ordered to be printed on the 25th August 1860.
59	Communications from the Home Department, forwarding copies of papers relative to the question of extending the provisions of the Imperial Passengers Act of 1855, to the carriage of passengers from India under the authority conveyed in section 99 of that Act.	Ordered to be printed on the 25th August 1860, and 2d February 1861.
60	Petition from Messrs. Fischer & Co., merchants of Salem, in Madras, praying for the extension to the Madras Presidency of the provisions of Act XV. of 1851 (for the better suppression of frauds in respect of cotton in Bombay).	Ordered to be printed on the 15th September 1860.
61	Petition from James Welch, esq., receiver of the estate of the late Rajah Rajkissen Bahadoor, praying for the passing of an Act to enable the talookdars of Sootanutty, of Baug Bazaar, and of Hoogulcoondee, to realise their rents and dues.	Ordered to be printed on the 6th October 1860.
62	Communication from the Home Department, forwarding an extract of letter from the Advocate General, relative to the expediency of a continuance of Act XXXIII. of 1857 (to make further provision relating to foreigners).	Ordered to be printed on the 24th November 1860.
63	Communication from the Home Department, relative to a proposed extension of the provisions of Act I. of 1849 (to provide more effectually for the punishment of offences committed in foreign states) to crimes committed by native subjects of the British Indian Government in any places beyond the limits of the British territories.	Ordered to be printed on the 24th November 1860.
64	Office Memorandum, Home Department, forwarding a communication from Mr. John Cochrane, regarding some of the provisions of the Penal Code, particularly those relating to homicide and the right of private defence.	Ordered to be printed on the 24th November 1860.
65	Papers regarding the celebration of marriages between native Christians, by persons who have not been appointed marriage registrars.	Ordered to be printed on the 17th November and 1st December 1860.
66	Petition of the Bombay Association against the continuance of Act III. of 1858 (to amend the law relating to the arrest and detention of state prisoners).	Ordered to be printed on the 2d February 1861.
67	Despatches from the Secretary of State, regarding the preparation of codes of civil and criminal procedure for the courts established by Royal Charter.	Ordered to be printed on the 23d July 1859 and 2d March 1861.
68	Communication from the Straits Government, on the subject of the relations of master and servant.	Ordered to be printed on the 13th April 1861.

List of Bills, &c. pending before the Legislative Council of *India*, &c.—*continued.*

69	Communications from the Home Department, forwarding Papers and a Despatch from the Secretary of State, on the subject of treasure-trove in India.	Ordered to be printed on the 22d December 1860, and on the 27th April 1861.
70	Papers relative to a proposed amendment of the Income Tax Act, XXXII. of 1860.	Printed.
71	Communication from the Home Department, forwarding certain papers from the Government of the North Western Provinces regarding the practical working of Act XL. of 1858 (for making better provision for the care of the persons and property of minors in the Presidency of Fort William in Bengal).	Ordered to be printed on the 29th June 1861.
72	Communication from the Home Department, regarding the frequent departure of vessels from ports in the Straits Settlement without port clearances.	Ordered to be printed on the 13th July 1861.
73	Communication from the Home Department, forwarding copies of papers relative to the expediency of rendering the Telegraph Law more effective for punishing persons found guilty of tampering with the telegraph or with telegraph employés.	Ordered to be printed on the 27th July 1861.
74	Papers relative to the levy, in certain cases, of a fine on the town, district, or division in which a riot or pillage is committed.	Printed.
75	Communication from the Financial Department, forwarding a copy of a Draft Bill to amend Act VI. of 1839 and Act XXI. of 1854 (the law relating to the several Banks of Bengal, Madras, and Bombay).	Ordered to be printed on the 16th November 1861.

List of Legislative Cases pending before the Government of *India*, on the 20th May 1854, and transferred to the Legislative Council, which have not yet been disposed of.

76	Proposals for improving the character and efficiency of pleaders in the Company's Court—(No. 1 of Home Office List).	
77	Proposals to repeal the law as to the filing of village accounts by putwaries and zemindars —(No. 4 of same List).	
78	Proposed change in the system of endorsement of Mofussil processes by the Judges of Her Majesty's Courts (No. 7 of same List).	
79	Question of the legality, or otherwise, of the deeds of sale of waste lands executed by the chief local officers in the Straits—(No. 8 of same List).	
80	Law to provide a permanent sheriff for the Presidency towns, and to facilitate the execution of the process of the Supreme Courts of Judicature—(No. 14 of same List).	
81	Proposed remedy of the inconvenience arising from the attendance, in the Supreme Court, of witnesses from distant places in the Provinces—(No. 15 of same List).	
82	Regarding the Small Cause Court, Madras—(No. 18 of same List).	
83	Regarding the Straits Judicature—(No. 24 of same List).	
84	Registry and sale of houses within military cantonments—(No. 26 of same List).	

LIST of Legislative Cases pending before the Government of *India*, &c.—continued.

85	Law to prevent unqualified persons from practising as chemists and druggists—(No. 27 of Home Office List).	
86	Law for the trial and punishment of European British subjects—(No. 31 of same List).	
87	Law to permit emigration to New South Wales—(No. 32 of same List).	
88	Respecting the alienation of Jagheer estates by decrees of Courts—(No. 33 of same List).	
89	With opinions on Draft Act relating to the registry of coasting and fishing vessels and harbour craft in the Presidency of Bombay —(No. 46 of same List).	
90	Proposed amendment of the law relating to marriage and divorce, to provide for the case of native converts to Christianity—(No. 48 of same List).	Printed with No. 63.
91	Law for registry of titles in landed property —(No. 71 of same List).	On the 2nd February 1856 a letter was ordered to be written to the Bengal Government forwarding Mr. Peacock's Minute for consideration.
92	Respecting the effect of Act XXX. of 1852 on the right of aliens to hold lands in the Straits Settlement—(No. 72 of same List).	
93	Suggestion of the General Shipowners' Society for the extension to India of clause 38 of the Merchant Shipping Act of 1854 —(No. 89 of same List).	Printed with papers relative to the Merchant Seamen's, the Seamen's Registration, and the Ship-burning Acts.
94	Law for Aden—(No. 91 of same List).	
95	Sale of houses in military cantonments— (No. 94 of same List).	

The first meeting of the Council of the Governor General for the purpose of making Laws and Regulations under the stat. 24 & 25 Vict. c. 67 (the Indian Councils Act) was held at Government House on Saturday the 18th January 1862. Besides his Excellency the Viceroy and Governor General and the members of the Supreme Council of India, the following had been summoned and attended as additional members:—

His Honor the Lieutenant Governor of Bengal.
His Highness the Maharaja of Puttiala, K.S.I.
The Honourable H. B. Harington.
The Honourable H. Forbes.
The Honourable C. J. Erskine.
The Honourable W. S. Fitzwilliam.
The Honourable D. Cowie.
The Honourable Raja Deo Narain Singh Bahadoor.
The Honourable Raja Dinkar Rao Rugoonauth Bahadoor.

His Excellency laid on the table the rules for the conduct of business. Subsequent meetings were held weekly on each Wednesday until the 30th April, the last day of the year under review in this report.

ACTS OF THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

ACT I. of 1862 (An Act to revive and continue in force, for a further period, Act XXXIII. of 1857, to make further provision relating to Foreigners).

THE object of this Act, as its title imports, was to continue in force for a further period the Act of 1857, which was passed to enable the Government to prevent the subjects of Foreign States from residing or sojourning in India, or from passing through or travelling in India, without the consent of the Government. The original Act had expired on the 5th December 1859; it was renewed for two years by Act XXVIII. of that year; and the present Act continued it for two years from the 5th December 1861.

ACT II. of 1862 (An Act to repeal Act XVIII. of 1861, for imposing a Duty on Arts, Trades, and Dealings).

This Act was passed on the ground that the License Tax imposed by Act XVIII. of 1861 was not required in the existing state and prospects of the Revenue. In repealing Act XVIII. of 1861, care was taken that the Mohturfa Tax, which had thereby been abolished, should not be revived.

ACT III. of 1862 (An Act to amend the Law relating to the use of a Government Seal).

This was a formal Act, simply to substitute for the Seal of the East India Company, when required by any Law to be affixed to any document, the Seals of the Government of India, or of the Local Government, as the case might be.

Act IV. of 1862 (An Act for regulating the Bank of Bengal).

This Act was passed to provide a new charter of incorporation for the Bank of Bengal. The power of the bank to issue promissory notes was about to cease by virtue of a notice given under the bank's former charter, VI. of 1839. The recent Act XXIV. of 1861, had authorised the Government to enter into agreements with the bank for carrying on the Currency and Treasury business, and the object of the present Act was to grant a new charter, adapted to the altered circumstances of the bank. The principal changes were, first, in respect of the capital, which, instead of 2,675 shares of 4,000 rupees each, was to consist of 10,000 shares of 1,000 rupees each, divisible into half and quarter shares, and power was given to increase the capital to an extent not exceeding 30,000 shares of 1,000 rupees each. Power was given to convert shares into consolidated stock, transferable by deed of transfer in sums of 250 rupees and upwards.

The business of the bank was altered—

1st. By extending the power of making loans on the security of Government securities and railway shares, to the power of making loans on the security of goods, wares, and merchandise not of a perishable kind.

2d. By adding the power of transacting and receiving agency business on commission.

3d. By empowering the bank to issue post-bills payable in India otherwise than to bearer on demand.

4th. By empowering the bank, in addition to drawing, buying, and selling bills of exchange, and granting post-bills payable in India, to draw bills of exchange and grant letters of credit payable out of India for the use of their constituents in the agency department, and to buy bills of exchange payable out of India for the purpose of remitting funds to meet bills or letters of credit.

Power was further given to the bank to take over certain Government business, and to arrange for remuneration and audit.

Further, the bank was authorised to establish branch banks and agencies, and to transact Government business thereat; also to purchase the capital, assets and business of other banks in India.

Act V. of 1862 (An Act to provide for the payment at the Banks of Bengal, Madras, and Bombay respectively of moneys payable at the General Treasuries of Calcutta, Madras, and Bombay).

The object of this Act was to remove all doubt of the sufficiency of presentment at the Banks of Bengal, Madras, and Bombay respectively, of all notes and securities payable by the terms thereof at the General Treasuries of Calcutta, Madras, and Bombay, and of the payments at the banks of all sums payable by or to Government at those treasuries, after those banks had been appointed by the Government agents for the purpose of making the payments theretofore made at the General Treasuries, under the provisions contained in Act XXIV. of 1861.

Act VI. of 1862 (An Act to annex a Schedule to Act IV. of 1862, for regulating the Bank of Bengal).

The schedule intended to have been annexed to the Bank of Bengal Act, IV. of 1862, having by accident been omitted, this Act was passed to supply the omission.

Act VII. of 1862 (An Act to amend Act XLVI. of 1860, to authorise and regulate the Emigration of Native Labourers to the French Colonies).

Act XLVI. of 1860 authorised emigration to the French Colonies in accordance with the convention negotiated with the Emperor of the French. That convention, as actually signed, provided that it should take effect on the 1st of July 1862, instead of September 1861, and added a provision that the Governor General of India in Council should, in conformity with Act XIX. of 1856 (to enable the Governor General of India in Council to suspend the operation of certain Acts relating to the emigration of native labourers), have power in certain circumstances to suspend emigration to the French Colonies.

Act VIII. of 1862 (An Act to protect the personal Dignity of His Majesty the King of Oude).

A pledge having been given to the King of Oude that his personal dignity should be respected, and that assurance having been only partially fulfilled by Act XIV. of 1860, this Act was passed to exempt the King from the jurisdiction of criminal courts except in capital cases; to provide for the service of criminal process; the protection of his person and property, and to regulate the mode of taking his evidence.

Act IX. of 1862 (An Act for constituting the Secretaries and other Officers of the Banks of Bengal, Madras, and Bombay, respectively, Ex-officio Assessors of certain of the Duties payable under Act XXXII. of 1860, for imposing Duties on Profits arising from Property, Professions, Trades, and Offices).

This Act was simply of a formal character, rendered necessary by the Treasuries of the Government being established at the banks.

Act X. of 1862 (An Act to consolidate and amend the Law relating to Stamp Duties).

This consolidation and amendment of the Stamp Laws was designed chiefly for the relief of the mercantile community, and of those engaged in the cultivation, production, and delivery of articles of commerce. In preparing it the Schedules of Act XXXVI. of 1860 were carefully revised, and a very large number of amendments made, some of which tended to the increase of the revenue by the more general use of stamps, and many of which gave a more liberal character to the law. The body of the Act was a re-enactment, with some amendments, of Act XXXVI. of 1860.

Act XI. of 1862 (An Act to amend Act X. of 1860, to amend Act VII. of 1859, to alter the Duties of Customs on Goods imported or exported by Sea).

This Customs Duties Act for the most part re-enacted the Schedule of Act X. of 1860; but it reduced the duty on piece-goods and twist, from 10 per cent. *ad valorem*, to 5 per cent. on the former, and 3½ per cent. on the latter, and placed paper and bottles in the free list; but subjected conveyances and carriages to 10 per cent. duty; porter, ale, and cider were reduced from 4 annas the imperial gallon, to 2 annas; and light wines were reduced from 2 rupees the imperial gallon, to 1 rupee a gallon, when their value did not exceed 12 rupees the dozen.

The Export Schedule (B.) was amended by the introduction into the free list of coals and iron.

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Legislative Council.

ACT XII. of 1862 (An Act to repeal Act II. of 1835, so far as it relates to the Provinces of Arracan and Tenasserim).

The Provinces of Arracan and Tenasserim having been united with Pegu and Martaban in the commissionership of British Burmah, it was necessary to alter the law which gave control and superintendence to the Sudder Court and the Board of Revenue; and this Act was passed for the purpose.

ACT XIII. of 1862 (An Act to provide for a new Silver and a new Copper Coinage).

A new coinage having been ordered, this Act simply amended the law so far as was necessary to provide for the new style of coinage. The name of Her Majesty was substituted for the East India Company, and it was provided that the coins should bear a likeness of Her Majesty, and the inscription "Victoria Queen," on the obverse, and on the reverse the designation of the coin with the word "India."

In other respects the Act mainly followed the provisions of the Acts which it consolidated and re-enacted.

ACT XIV. of 1862 (An Act to amend Act XIV. of 1859, to provide for the Limitation of Suits).

This Act was supplementary to Act XXXII. of 1861. In effect it postponed the operation of the Limitation Act XIV. of 1859, as to the amount of Bills for articles sold by retail to the 1st of January 1865.

The following Acts also were passed by the Council before its adjournment on the 30th April 1862. But as they did not receive the assent of the Viceroy and Governor General until the 1st May, the account respecting them will fall into the narrative of the current year 1862-63:—

Act XV. of 1862 (An Act to amend the Code of Criminal Procedure).

Act XVI. of 1862 (An Act to limit in certain cases the amount of Assessment to the Duties chargeable, after the 31st day of July 1862, under Act XXXII. of 1860).

Act XVII. of 1862 (An Act to repeal certain Regulations and Acts relating to Criminal Law and Procedure).

Act XVIII. of 1862 (An Act to repeal Act XVI. of 1852 in those parts of British India in which the Indian Penal Code is in force, and to re-enact some of the provisions thereof with amendments, and further to improve the administration of Criminal Justice in Her Majesty's Supreme Courts of Judicature).

Act XIX. of 1862 (An Act to extend to the Province of Oude certain provisions of Acts XIV. of 1843 and XXXVI. of 1855, relating to the manufacture of contraband salt, and to amend the last-named Act).

LIST of BILLS pending before the COUNCIL of the GOVERNOR GENERAL for the Purpose of making LAWS and REGULATIONS at the Adjournment on the 30th April 1862.

—	TITLE OF BILL.	WHAT STAGE BILL HAS REACHED.
1	For securing certain grants of immovable property made by the State.	Introduced on 29th January 1862, and referred to a Select Committee (consisting of Messrs. Harington, Forbes, and Erskine, and Rajah Deo Narain Singh), whose report was due on 1st May 1862.
2	For the better protection of the public against bad coin.	Introduced on 5th March 1862, and referred to a Select Committee (consisting of Messrs. Ritchie, Harington, Erskine, Fitzwilliam, and Cowie), with an instruction to report in two months.

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Legislative Council.

List of Bills pending before the Council of the Governor General, &c.—*continued.*

—	Title of Bill.	What Stage Bill has reached.
3	To amend the law relating to affidavits, affirmations, and solemn declarations.	Introduced on 26th February 1862, and referred to a Select Committee (consisting of Messrs. Ritchie, Harington, Forbes, and Erskine), with a like instruction.
4	To provide for the registration of assurances	Introduced on 9th April 1862, and referred to a Select Committee (consisting of the Lieutenant Governor, Messrs. Harington, Forbes, and Erskine, and Rajah Deo Narain Singh), whose report was due on 12th July 1862.
5	To enlarge the jurisdiction of the Courts of Requests in the settlement of Prince of Wales' Island, Singapore, and Malacca.	Introduced on 26th February 1862, and referred to a Select Committee (consisting of Messrs. Ritchie, Harington, and Forbes), whose report was due on 1st June 1862.
6	To extend certain provisions of Acts XIV. and XXV. of 1856 to the town and suburbs of Rangoon, and to the towns of Moulmein, Tavoy, and Mergui, and for appointing municipal commissioners, and for levying rates and taxes in the said towns.	Introduced on 19th March 1862, and referred to a Select Committee (consisting of the Lieutenant Governor, Messrs. Ritchie, Forbes, and Erskine), with an instruction to report in one month.
7	To extend Act XXIII. of 1840 (for executing within the local limits of the jurisdiction of Her Majesty's courts legal process issued by authorities in the Mofussil).	Introduced on 26th February 1862, and referred to a Select Committee (consisting of Messrs. Ritchie, Harington, Forbes, and Erskine), whose report was due on 1st June 1862.
8	Relating to emigration to the British colonial dependency of Seychelles.	Introduced on 12th February 1862, and referred to a Select Committee (consisting of Messrs. Ritchie and Forbes), whose report was due on 15th May 1862.
9	For the consolidation and amendment of the law relating to customs duties.	Introduced on 26th March 1862, and referred to a Select Committee, whose report was made on 26th July 1862, and published.
10	To amend Chapter XII. of the Indian Penal Code, and to provide for certain offences against the coin.	Introduced on 5th March 1862, and referred to a Select Committee (consisting of Messrs. Ritchie, Harington, Erskine, Fitzwilliam, and Cowie), with an instruction to report in two months.
11	Relating to breaches of contract committed in bad faith.	Introduced on 12th February 1862, and referred to a Select Committee (consisting of the Lieutenant Governor, and Messrs. Ritchie, Harington, Erskine, and Cowie), whose report was due on 15th May 1862.
12	To provide for the administration of civil and criminal justice at Aden.	Leave given to bring it in on 29th January 1862.
13	To remove the district of Humeerpore, in the North Western Provinces, from the operation of the General Regulations.	Introduced on 26th February 1862, and referred to a Select Committee (consisting of Sir B. Frere, and Messrs. Ritchie, Harington, and Erskine), with an instruction to report in two months.
14	For the amendment of Act XXV. of 1838 (relating to Bills of persons whose personal property cannot by the law of England pass to their representatives without probate or letter of administration).	Leave given to bring it in on 29th January 1862.
15	To amend and consolidate the law relating to the conveyance and transfer of property in India, vested in trustees or mortgagees, in cases governed by English law.	Ditto - - - - ditto.
16	To give trustees, mortgagees, and others, in cases governed by English law, certain powers now commonly invested in settlements, wills, and mortgages.	Ditto - - - - ditto.
17	To further amend the law of property and to relieve trustees in cases governed by the English law.	Ditto - - - - ditto.

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Legislative Council.

List of Bills pending before the Council of the Governor General, &c.—*continued.*

—	Title of Bill.	What Stage Bill has reached.
18	To consolidate and amend the law relating to the partition of estates paying revenue to Government in the North Western Provinces.	Introduced on 19th March 1862, and referred to a Select Committee (consisting of Messrs. Ritchie, Harington, and Erskine, and Rajah Deo Narain Singh), whose report was due on 22d June 1862.
19	To authorise the punishment of whipping in certain cases.	Introduced on 26th February 1862, and referred to a Select Committee (consisting of the Lieutenant Governor, and Messrs. Ritchie, Harington, and Cowie, and Rajah Deo Narain Singh), whose report was due on 1st June 1862.
20	To enable the Government to divest itself of the management of religious endowments.	Introduced on 26th February 1862, and referred to a Select Committee (consisting of the Lieutenant Governor, and Messrs. Ritchie, Harington, and Forbes, and Rajah Dinkar Rao Rugoonauth), whose report was due on 1st June 1862.
21	Further to provide for the marriages in India of persons professing the Christian religion.	Leave given to bring it in on 5th February 1862.
22	For the prevention of fraudulent transfer of property and of secret trusts.	Ditto - - - - ditto.
23	To provide for the construction, by companies and by private persons, of branch railways, iron tram-roads, common roads or canals, as feeders to public railways, canals, or roads, or to navigable rivers.	Ditto - - - - ditto.
24	To provide for the dissolution in certain cases of marriages entered into by converts before their conversion.	Leave given to bring it in on 12th February 1862.
25	For the amendment of the law relating to the confinement of prisoners convicted of offences in Native States.	Leave given to bring it in on 12th February 1862, and published on 28th May 1862, under Rule 19.
26	For the dissolution of the Subordinate Medical Officers' Widows and Orphans' Fund, and the distribution of the fund belonging thereto.	Introduced on 9th April 1862, and referred to a Select Committee (consisting of the Lieutenant Governor, and Messrs. Harington, Forbes, and Erskine), whose report was due on 12th July 1862.
27	To provide for the succession to and the rights in respect of certain talooks and granted estates in Oude, and for the jurisdiction of the courts of that province in suits relating to land.	Leave given to bring it in on 12th March 1862.
28	To provide for the sale of waste land and for the redemption of the land revenue.	Ditto - - - - ditto.
29	To amend Act X. of 1859 (to amend the law relating to the recovery of rent in the Presidency of Fort William in Bengal) so far as it relates to the territories under the Government of the Lieutenant Governor of the North Western Provinces.	Introduced on 9th April 1862, and referred to a Select Committee (consisting of Messrs. Harington and Erskine, and Rajah Deo Narain Singh), whose report was due on 12th July 1862.

Calcutta,
8 December 1862.

(signed) *M. Wylie,*
Deputy Secretary to the Government of India.

Chap. II.
Financial.

CHAPTER II.

FINANCIAL DEPARTMENT.

ANNUAL REPORT on the Transactions of the Government of India in the Financial Department in 1861-62.

LEGISLATIVE.

The following Acts affecting the public revenue or fiscal arrangements were passed in the year 1861-62 by the Legislative Council of India:—

Act XVII. of 1861, regulating Customs Duties in the North Western Provinces.

Act XVIII. of 1861, commonly called the License Tax Act.

Act XIX. of 1861, to provide for a Government Paper Currency.

Act XXI. of 1861, limiting in certain cases the amount of assessment under the Income Tax Act.

Act XXIV. of 1861, to enable the Banks of Bengal, Bombay, and Madras to arrange for the management of the Government Treasury and the agency of the Government currency business.

Act XXXI. of 1861, to regulate the manufacture of Saltpetre.

By the Governor General of India in Council:—

Act II. of 1862, to repeal the License Tax Act.

Act IV. of 1862, for regulating the Bank of Bengal.

Act V. of 1862, providing for the conduct of treasury and currency business at the Banks of Bengal, Madras, and Bombay.

Act X. of 1862, to amend the Stamp Act.

Act XI. of 1862, to amend the Customs Duties.

Act XIII. of 1862, to provide for a new Coinage.

The first of these Acts regulated the inland customs of one province, and caused no material addition to the revenues. Act XXXI. of 1861 has added to the public revenues directly, by charging fees and licenses to refine and manufacture saltpetre, and indirectly, by checking the introduction into the market of unexcised salt educed in the manufacture of saltpetre.

The License Tax had been assessed, but, month by month, ere it was collected, the cash balances increased, till, on the 1st February, they reached 18,615,403 *l.* Judging that income would exceed expenditure during the next three months, the Government of India dispensed with the tax. Act XVII. of 1861 was repealed, and 5,000,000 of Her Majesty's subjects were relieved from direct taxation.

In the financial statement made in the Legislative Council in February 1861, a deficit of 500,000 *l.* for public works was left in the Budget, to be met by the Local Governments from local taxation. As the year went on measures were proposed by the several Local Governments for meeting their shares of the deficit, but, from one cause or another, all these schemes fell through. Nevertheless, it was not found necessary to recall the grants on account of irrigation, cotton roads, and other reproductive public works. On the contrary, at the end of the year, the improved revenue, the certainty of its progressive increase, and confidence that the expenditure (except in the case of reproductive public works) would fall, enabled the Government of India, in providing ways and means for the demands of 1862-63, to reduce the duty on piece goods, and to relieve two-thirds of the Income Tax payers from assessment.

A further amendment of the Income Tax Act (XXXII. of 1860), passed on the 1st August, was also made. The Act provided for the assessment during five years of 4 per cent. on all incomes (above 500 rupees a-year) payable in India, or from the revenues of India, and of 2 per cent. on all such incomes between 500 rupees and 200 rupees a-year. Assessments were not everywhere finished at the close of the first year of the currency of the Act, and it was reported from many parts of the country that the people disliked an inquiry being made as to their incomes even more than they disliked paying the tax. It was then decided that tax-payers should not be harassed by being asked for fresh

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fresh returns, and an Act was passed authorising them to pay on the assessments of the first year. This Act did not come into operation in certain districts where the first assessment was either grievously unjust or grossly inadequate. The collections have hitherto by no means represented the taxable income of the country. It may be that all the efforts of collectors have failed to gauge the national income. Whether the original assessment was perfect or not, the Government of India has resolved to keep to it for the three years the Income Tax Act has yet to run, obtaining some compensation in diminished charges of collection. The repeal of the tax upon incomes below 500 rupees has already been noticed.

REVENUE.

The fluctuations or progress in the ordinary branches of revenue do not call for notice in this place, but the large increase under stamps deserves a passing remark. The receipts for the last five years are shown in the margin. The increase has been 3,715-fold within the last five years. Act X. of 1862 has amended the Stamp Law, and steps are being taken in the several provinces to ensure the observance of its provisions. Considering the small sales that have been made of stamps for bills of exchange, and the very large business done by native bankers in country bills, it may be doubted whether the provisions of the Act are fully observed.

	£.
1857-58 -	456,363
1858-59 -	593,214
1859-60 -	737,527
1860-61 -	1,182,781
1861-62 -	1,695,457

Customs Tariff.

The Customs Revenue has been for the greater part of the year under the control of the Financial Department. Towards the end of the year it was re-transferred to the Home Department. The Calcutta tariff, as remodelled by Messrs. Spooner and Bullen, has given general satisfaction. A memorial was received through the Secretary of State from a London house complaining of the unfairness of the soap tariff. On inquiry, it appeared that the memorialists had not made themselves acquainted with the tariff, and that it was owing to their ignorance of its provisions that they suffered the loss of which they complained.

From Calcutta, Madras, Bombay, and London, memorials were received, asking for a reduction of the saltpetre Duty, on the ground that it discouraged manufacturers in the interior, and would in time crush the export trade. The memorialists contended that the late Mr. Wilson was wrong in supposing that India had almost a monopoly of this trade; for much artificial saltpetre was underselling the Indian article, and fast driving it out of European markets. Returns were called for, and it appeared that the monthly export of saltpetre fluctuated greatly; but the exports for the year ending the 20th February 1862 were larger from Bombay, Kurrachee, and Calcutta, than they had been during the previous twelvemonth. Madras exports were merely nominal. The large increase of the saltpetre exports of 1861–62 over the exports of 1860–61, would show that up to the present time the new duty has had no prohibitive effect.

An inequality in the incidence of duty on different kinds of tobacco was brought to the notice of Government. The duty has since been equalized.

EXPENDITURE.

The various Governments and Administrations, aided by the reports of the Military Finance, the Police, and the Civil Finance Commissions, were able to effect large reductions of establishments, which told upon the expenditure of the year. Mr. Temple's deputation in 1861–62 to inquire into the finances of the Assigned Districts, in the territories of the Nizam and of Nagpore, also produced good results, and contributed, as regards Nagpore, and the Saugor, and Nerbudda Territories, to lessen the cost of forming the Government of the Central Provinces.

The constant tendency to increase in the expenses of civil administration requires to be carefully watched, and the valuable help in retrenchments which the Local Governments afforded in 1860–61–62 showed the importance of securing their sustained efforts in this direction. With this view, a Resolution was published, under date 11th November 1861, on the obligation of the various provinces to contribute, more or less, according to their ability, to Imperial charges, besides providing for their own proper expenses. Exception was taken in the course of the year to some details in the Resolution, but its leading principles were in the main accepted.

It was observed in the Resolution that, "in considering each great division of the Empire, it is generally assumed that if the receipts within its limits cover all the expenditure within the same limits, and leave a sufficient surplus to meet a fair proportion of the Imperial charges in India and at home, such division or province is a profitable possession, and *vice versâ*.

"This is not, if taken with due limitation, an unfair mode of estimating the fiscal value of any large province. It is not generally more wide of the truth than the more difficult calculation of the proportions in which any large item of expenditure, the military, for instance, takes place on account of the province in which it is incurred, or on account of other provinces; and from the ease with which the comparison of local receipts and disbursements is made, it is the more popular and usual mode of estimating the fiscal value of any separate division, and the comparative necessity for greater or less restriction on the expenditure therein. But the data assumed as local receipts and disbursements are not in all cases correct, and the amount required as a fair proportionate contribution to the general expenses of the Empire is in all cases under-estimated."

This under-estimate, the Resolution proceeded to show, arose from not taking into account the heavy interest on debt, and that, guaranteed on railway capital, the proper amount of home charges, and the expenses of political agencies and of troops serving in Foreign Native States, or under Administrations, or in places which are not able to pay for their indispensable military occupations. The due allowance for all home and Imperial charges, it was observed in the Resolution, might require 12½ millions sterling; and, as the total income for India for the year, including *boná fide* receipts from all sources, was estimated for 1861–62 at nearly 41⅓ millions sterling, it was considered "that the home and Imperial charges, which have no adequate provision of their own, in the shape of receipts, amount to about 30½ per cent., or about 5 annas in each rupee of the whole income.

"It is necessary to bear this in mind, because a habit has of late years grown up of considering that every province which pays its own local charges, and has some surplus left, however small this may be, is a profitable possession, so far as income and expenditure are concerned; whereas a consideration of the above facts, and of the table whence they are deduced, will show that unless a province has, after paying all local charges, military as well as civil, a surplus equal to about 30 per cent. of its total income, it cannot pay its rateable share of Imperial charges of the general Government, of the railways, post-office, and electric telegraph, and marine, of the supply of stores and recruits from England, of the interest of the public debt, and various other charges which it is impossible to localise.

"This, of course, is only generally true, and can only be applied, even generally, to the larger and more distinct divisions of the Empire. An isolated possession like Aden cannot be expected to yield in direct receipts of revenue any return at all adequate to its value in a military, naval, or political point of view, and as a necessary link in our communication with Europe.

"But as regards those great divisions of India which have, in former times, maintained themselves as separate kingdoms, and which, in size, population, and importance, equal many of the independent monarchies of modern Europe, it is very necessary that each Government or Administration should consider, not only how far it pays all its own local expenses, but to what extent it contributes the necessary quota towards those Imperial expenses which admit of no localisation."

While exceptions are admitted and recognised in the Resolution, "as a general rule, it cannot be disputed that provinces of the magnitude of those enumerated ought, at the least, to be able to defray all their own local expenses; and to this end, the efforts of the officers in charge of the Administration must be incessantly directed.

"Each of these provinces has, in its time, formed an independent kingdom, and has maintained itself successfully for generations against all neighbouring Powers, save those which aspired to, or achieved, paramount authority throughout India. Protected as they now are from external aggression, there is absolutely no adequate cause for the undue proportion of military expenditure, which, in every one of the provinces named, exceeds what was incurred by the British Government while the Native military power was still in possession of the province; and is, in some cases, even in excess of what both the British and Native power combined formerly expended for military purposes.

* * * "The large amount of military charges attracts, perhaps, less than any other, the attention of the local Administrations, which are apt to consider such matters as beyond their immediate control, and only indirectly connected with their responsibilities.

"It is true that the general military defence of the country is peculiarly and especially the duty of the general Government of India; but there is no officer in civil charge of a province who has it not in his power to influence the decision of that Government as to the force requisite to garrison his province:—and, apart from the direct influence of good or bad government on the quiet of a country, every such officer has constant opportunities of reviewing every question connected with its military occupation, and has often better means than the military commandant of knowing in what quarter reductions of a military force are possible. It is therefore a duty of each local Administration to take the initiative in proposing measures of reduction, whenever it sees a possibility of doing so.

* * * "The Governor General in Council trusts that an attentive consideration of the facts disclosed by these Returns" (viz., the Annual Estimates of Charges in each Department of Administration), "will not only show the necessity of sustained exertion, but point out the particular items of charge to which such exertion may be most carefully directed."

In connexion with the Estimates of Expenditure, it may be mentioned that it was determined to show in the Imperial Budget from 1862–63, the revenues and charges of the Assigned Districts in the Territories of the Nizam, which hitherto, as appertaining to a debt account, had been shown only in the estimate of cash requirements.

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CASH BALANCES.

The following Table shows the Cash Balance in India at the end of each month of the year 1861–62:—

		£.
31st May	1861	15,025,314
30th June	,,	16,530,046
31st July	,,	16,238,214
31st August	,,	15,528,186
30th September	,,	15,192,756
31st October	,,	14,265,910
30th November	,,	15,345,554
31st December	,,	17,073,811
31st January	1862	18,615,403
28th February	,,	18,225,524
31st March	,,	17,584,550
30th April	,,	17,787,678

An impression prevails that the full amount of cash balance is not always at the disposal of Government to meet its expenses, from the circumstance that deposits contribute to the amount of the cash balance. It may be explained that as the revenue is collected in unequal monthly amounts, the largest portion being realised in the second half of the year, the cash balances are drawn upon to meet the deficit in the first six months. The amount required to be retained as Cash Balances is regulated, in ordinary times, by the total receipts, whether of revenue or deposits, and the total payments, whether of charges or debt, in each month, so that the amount of cash balance in any month represents the amount which, with the receipts to accrue during the remainder of the year, is available for meeting both liabilities and charges of the Government.

Concerning the heading "Debt" in the yearly statements and accounts, misunderstanding has occasionally arisen. Under this head are exhibited the receipts and payments for the following purposes:—

Imperial Loans. Treasury Notes of the Service Funds. Service Funds.	These bear interest.
Deposits received and repaid. Local Funds, such as Road, Ferry, and other Funds. Local Loans. ,, Taxes.	These are under the control of Local Governments, and their subordinates.
Military Prize Funds.	These are casual.
Advances made or recovered by Government. Railway Earnings received, and Working Expenses paid, pending final adjustment in London. Miscellaneous.	These are running accounts.

Setting aside railways, receipts and disbursements under debt, one year with another, and when a loan is not raised or paid off, nearly balance each other, the difference being such as not to disturb, materially, any general conclusions regarding the financial position of the Government, which may be drawn from the account of receipts and charges and cash balances.

ADMINISTRATION.

Department of Account.

Greater exactness and punctuality in the rendering of accounts has been required during the year, and the bringing up of arrears has been enforced. To do this, it has been found necessary to strengthen the Central Offices of Account in the Civil and Military Departments. The office establishment of the Financial Secretary and the Accountant General has been increased. In the Offices of Account, the salaries paid to Chief Clerks have been raised. An Assistant Secretary has been appointed to preside over each department of the Financial Secretary's Office, and to help the Secretary an Under Secretary has been appointed. To assist the Chief of the Military Finance Department there have been appointed a Secretary and three Assistant Secretaries. A sufficient establishment at the Central Offices is the best security for due control and supervision.

To enable the smaller subordinate Administrations to control their finances and expenditure, an Accountant, with a sufficient staff, has been appointed at Hyderabad and at Nagpore.

Military Finance Department.

This department submitted the revised Military Estimates at the beginning of the year. It is the adviser of Government in all matters of military and naval expenditure. Unless in cases of special urgency, the Government of India takes no step involving financial considerations, in either military or naval matters, without first consulting the Military Finance Department. All departments of the State avail themselves of its advice and experience.

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Civil Finance Commission.

This Commission, after reporting on the fixed and fluctuating charges for establishments in the Revenue, Judicial, and Postal Departments, and on establishment in Public Works Departments, was dissolved. The work it has hitherto performed will be the business of a separate branch of the Financial Secretary's Office. The Civil Finance Commission either itself suggested or induced Departmental Chiefs to suggest economical reforms.

Board of Audit.

The Auditor General and the Chief of the Military Finance Department sitting together constitutes the Board of Audit. Before this Board are brought all questions of detail in financial administration, which affect both military and civil arrangements. Each member brings a thorough acquaintance with his own department, and oral discussion obviates the necessity for further correspondence. The Government often avails itself of the advice of this Board. The proceedings of the Board are reported every month to the Government of India.

Transfer of Government Treasury Business to Banks.

During the year 1861–62 the custody of, and the duties connected with, the State balances at the three Presidency towns have been entrusted to the Presidency banks. Each bank has engaged to transact for Government all business that a bank usually transacts for its customers. But to the agreements are attached conditions which make the relation between the State and the Bank somewhat different to the relation ordinarily subsisting between bankers and customers. The State has bound itself to keep its balances up to a certain sum, or to pay interest on the deficiency. This sum has been taken at the lowest balance in each treasury during the last five years. The bank is allowed to use this minimum balance and about half as much more, just as it uses the balances of other customers. But when the Government balances exceed the maximum balance, or about one and half times the lowest balance of the last four years, the Bank can employ the surplus only in purchasing Government Securities or Guaranteed Stock. Moreover, the Government makes to the Bank a small yearly cash payment towards the expenses incurred on account of clerks, desks, counter-space, &c. Altogether the actual saving from the abolition of the three Sub-Treasurerships, in round numbers, is about 19,000 *l.* a-year. The yearly payments to the three banks amount to about 10,000 *l.* It is found to be a great convenience to the mercantile and general public that all Government payments should be made at the centre of commercial activity. In the provinces wherever the Presidency banks have established branches, Government balances and Government treasury business are to be entrusted to the branch banks. During the year 1861–62 nine of the branch banks were ready to undertake Government business.

CURRENCY NOTES.

In February 1861 notice had been given to the several Presidency banks that twelve months after date, the license to circulate their own notes would be withdrawn. Early in the year 1861–62 an Act was passed to provide for a Government Paper Currency. In the month of March 1862, Government currency notes first came into circulation. The notes were manufactured in England, and were of six denominations:—10 rupees, 20 rupees, 50 rupees, 100 rupees, 500 rupees, and 1,000 rupees. They were issued by, and bore the signature of, the Currency Commissioner. But it was to the agency of the chartered Presidency banks that the Government of India principally looked to extend the circulation of Government currency notes. Each Presidency bank engaged to pay notes for coin and coin for notes to all comers. Each bank took from the Currency Commissioner in exchange for coin as many notes as it required to enable it to begin the business of giving notes for coin. To recompense the banks for their services, the Government engaged to pay each bank ¾ per cent. on the average note circulation through the bank's agency. When the year 1861–62 ended, Government currency notes had been in circulation only two months. Yet, on the 30th April 1862, there were in circulation—

	£.	
In the Calcutta Circle - -	2,300,000	worth of notes.
In the Bombay Circle - -	1,500,000	„
In the Madras Circle - -	300,000	„

It will be remembered that the limit by charter in the note circulation of the Presidency banks was—

	£.
For Bank of Bengal - -	2,000,000
For Bank of Bombay - -	2,000,000
For Bank of Madras - -	1,000,000

BARGAINS WITH BANKS.

The time has not yet come, and this is not the place, for discussing the terms of the agreements with the banks. The market value of Bank of Bengal shares has, it is true, risen enormously since the publication of the agreement between the Bank and the Government. But material interest should be at the base of every sound contract. Considerable

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siderable saving to the State has been effected by, and much convenience to the State has resulted from, the new Treasury arrangements. Government currency notes in Bengal, within two months of their first issue, has reached a circulation larger than the circulation of Bank of Bengal notes under the old charter. No Government establishments are necessary to extend and watch the circulation. Interest from investments in securities by the Currency Commissioner of part of the coin received for notes will more than cover the charge on account of commission to the banks. If at the expiration of the five years for which the agreements run, currency notes are circulating throughout India side by side with silver, the State need not grudge to the bank shareholders one penny of their extra dividends.

MONEY ORDERS.

For very many years the Government of India has allowed its servants to remit their salaries from one part of India to another through the agency of the Government treasuries. To the native soldier, whose service sometimes took him thousands of miles from his home, it was almost a necessity that he should be able to send some part of his pay to support his family. To military and civil officers, the facility afforded for remitting their salaries to the Presidency towns was a great boon. To such an extent had the privilege thus granted been used, that the business at Government treasuries of granting and cashing privilege drafts became very heavy. It was determined to introduce a system of money orders, something like the Post-office Order system which has worked so long in England. The Government would undertake to send through its own agency small sums of money from one part of the country to another, making a small charge to cover the cost of supplying money at all money-order offices and of granting and cashing orders. But the Government did not choose the Post-office as the agency to be employed. Rightly or wrongly, the public, or at any rate, the native public, has no great faith in the Post-office agency, and the net-work of Collectors' treasuries all over India supplied an agency ready to hand. Although Collectors' treasuries were considered to be the fittest offices for cashing orders, it was thought inexpedient to increase the already heavy duties of a Collector by throwing on his shoulders the charge and responsibility of a Money Order Office.

A Committee was appointed to consider how the Money Order system might best be introduced. The Committee's report was under consideration at the close of the year.

COMMITTEE OF SECRETARIES.

The changes in the Bengal Army, consequent on "Amalgamation," and the formation of a Staff Corps, made it necessary that Government should re-consider all Military Staff allowances. Early in the year the task of reporting on all staff allowances, and of suggesting some regular scale of salary for all staff appointments, was entrusted to a Committee, among the members of which were the Secretaries to the Government of India. The Committee's Report, classifying all appointments, was received and was forwarded with the opinion of the Government of India to Her Majesty's Secretary of State. The Committee of Secretaries has also suggested rules for setting the absentee allowances of military officers in civil employ on an equitable footing.

MINT.

The total assay value of silver bullion received into the Mint during the year 1861–62 was 3,21,91,283 rupees, being almost 126 lacs above the amount received during the previous year.

The amount of Government and merchants' bullion received into the Mint during the last four years was—

Years.	Gold.		Silver.	
	Government Bullion.	Merchants'.	Government Bullion.	Merchants'.
	Rs.	*Rs.*	*Rs.*	*Rs.*
1858-59	408	11,88,618	5,85,599	3,45,40,585
1859-60	3,109	9,61,124	4,05,57,240	2,66,89,869
1860-61	10	4,89,891	11,04,219	1,84,97,595
1861-62	8,33,788	6,98,751	1,12,91,944	2,08,99,339

The total coinage of the year under review was, in pieces, 5,73,04,681, and in value 2,67,33,174 rupees, or less by 5,14,49,362 in pieces, and 20,68,448 rupees in value, than the out-turn of 1860–61. The details of the year's out-turn are as follows:—

		Tale.	Value in Rupees.
Gold		39,111	5,86,665
Silver	Whole Rupees	2,45,11,292	2,45,11,292
	Half „	10,37,664	5,18,832
	Quarter „	22,66,905	5,66,726
	Eighth „	9,56,792	1,19,599
Copper	Double Pice	4,43,637	13,863
	Single „	2,43,05,542	3,79,774
	Half „	22,99,992	17,969
	Pie	2,268	12
	Whole Cents	4,25,114	9,565
	Half	5,61,753	6,320
	Quarter	4,54,611	2,557
	Total	5,73,04,681	2,67,33,174

The decrease in the out-turn of 1861–62 is due, for the most part, to a stoppage of work during three months for repairs of the Mint. A large supply of pice was received from England, and as the stock in hand was equal to the demand, opportunity was taken to repair* the Mint machinery, and to set up the new copper boilers received from England. The whole is now in thorough working order, and the Mint can, if occasion require, turn out 12 to 14 crores of pieces.

The per-centage of charges on coinage has been 0–9–4·395 against 0–4–8·258 of the previous year. The increase in charges is due partly to the costs of repairs, partly to short coinage of the year, and partly to the rise in prices of certain materials. The total income of the Mint for the year on account of duty, premelting, refining, and dross was 6,65,146 rupees, the total charges were 3,60,269 rupees—leaving a surplus which, with 2,04,343 net bullion profits, amounted to 5,09,220 rupees. The per-centage of profit on coinage was 1–14–5·726. During the year a more expeditious method of recovering silver from dross has been adopted. The dross accounts of the whole Mint are now closed monthly.

Assay.

The work of assay has been conducted as usual. The following statements show the amount of gold and silver assayed during the years 1860–61 and 1861–62:—

		On Government Account.	On Merchants' Account.	Value Standard Meltings.	Value Coined.
Gold	1860–61	10	4,89,891	- - -	6,50,385
	1861–62	8,33,787	6,98,751	- - -	5,86,665
Silver	1860–61	11,04,219	1,84,97,595	4,33,23,071	2,69,86,456
	1861–62	1,12,91,943	2,08,99,339	4,70,83,244	2,57,16,449

The total assays made in the year, and the daily average of silver assays, were as follows:—

		1860–61.	1861–62.
Total Assays	Gold	393	615
	Silver	11,215	13,282
Daily average of Silver Assays		40	46

* *Note.*—The first thorough repairs since the construction of the present Mint.

BANK OF BENGAL.

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During the first half-year of 1861–62, the value of money declined steadily. In October, Bank rates were reduced to 4½ and 3½, and remained at that figure till the end of December. The Directors devoted a portion of the Bank's large balances to investments in Government securities. The investments were made early in the year, and the value of the securities has been rising ever since. On the receipt of the intelligence of a threatened outbreak with America, prices fell, but soon recovered themselves, and continued steadily to rise. The Directors declared a dividend for the secnod half of the year 1862 at the rate of 9 per cent. per annum, free of income tax.

During the second half of the year under review, the Council of the Governor General for making Laws and Regulations passed an Act conferring a new charter on the Bank of Bengal. The Bank was by it allowed to undertake Government business, and to draw bills on London for the convenience of its constituents in the Agency Department. The charter provided for an addition to the capital of the Bank, and for the establishment of branch banks. Branch banks were opened at Mirzapore, Patna, Dacca, Benares, and Rangoon.

A dividend was declared for the half-year at the rate of 14 per cent. per annum, free of income-tax.

CHAPTER III.

POST OFFICE.

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Post Office.

ANNUAL REPORT of the Operations of the Post Office of India, for the Year 1861–62.

(No. 2019.)

From *G. Paton*, Esq., Director General of the Post Office of *India*, to *E. C. Bayley*, Esq., Secretary to the Government of *India*, Home Department; dated Camp Nynee Tal, the 13th October 1862.

Sir,

I have the honour to submit a Report on the administration of the Post Office of India for the official year 1861–62.

2. I regret exceedingly the delay which has occurred in submitting this Report; it is mainly owing to the Postmaster General of the Punjab, whose Report was not received till the 3d ultimo at my office.

3. The number of new Post Offices and Letter Boxes opened during the year within each Presidency is shown in the following Table:—

PRESIDENCY.	Post Offices.		Letter Boxes.		Total.	
	Opened in 1860–61.	Opened in 1861–62.	Opened in 1860–61.	Opened in 1861–62.	1860–61.	1861–62.
Bengal - - - - - - -	20	3	4	2	24	5
Madras - - - - - - -	1	1	5	2	6	3
Bombay - - - - - - -	14	46	9	26	23	72
North-Western Provinces - - -	2	3	5	5	7	8
Punjab and Scinde - - - - -	–	–	–	–	–	–
Pegu - - - - - - -	–	–	–	1	–	1
Total - - -	37	53	23	36	60	89

4. The following Statement exhibits the total number of Post Offices and Receiving Houses in each Presidency as 984, of which 203 are Head and 721 Sub-Offices:—

PRESIDENCY.	1854–55.			1861–62.			Total.				Grand Total.	
	Head Post Offices.	Subordinate Post Offices.	Receiving Houses.	Head Post Offices.	Subordinate Post Offices.	Receiving Houses.	Post Offices.		Receiving Houses.			
							1854–55.	1861–62.	1854–55.	1861–62.	1854–55.	1861–62.
Bengal - -	82	75	13	66	176	13	157	242	13	13	170	255
Madras - -	26	104	20	26	113	24	130	139	20	24	150	163
Bombay -	24	83	12	28	199	13	107	227	12	13	119	240
N. W. Provinces	67	184	10	49	141	10	251	190	10	10	261	200
Punjab and Scinde -	–	–	–	20	90	–	–	110	–	–	–	110
Pegu - -	–	–	–	14	2	–	–	16	–	–	–	16
Total -	199	446	55	203	721	60	645	924	55	60	700	984

5. The

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5. The Post Offices in the Punjab and Scind have been transferred to the control of a separate Postmaster General.

6. The following table shows the distance over which the mails were conveyed throughout India by railway, mail-cart, horses, runners and boats. The total number of miles of mail-road in India is 45,554½.

PRESIDENCY.	Railway.	Mail Cart.	Runners and Boats.	TOTAL.
	Miles.	*Miles.*	*Miles.*	*Miles.*
Bengal - - - - - - -	358½	300	11,482	12,140½
Madras - - - - - - -	483	772	7,889	9,144
Bombay - - - - - - -	576	1,597	7,228	9,401
North Western Provinces - - -	276	1,380	6,586	8,242
Punjab - - - - - - -	105	673	582* 2,954	4,314
Pegu - - - - - - -	- -	- -	2,313	2,313
TOTAL - - -	1,798½	4,722	39,034	45,554½

* Horse.

7. The average cost per mile of conveying the mail in the several Presidencies is shown below:—

PRESIDENCY.	Foot Lines.	Horse Line.	Mail Cart Line.	Boats.
	Average Cost per mile.	Average Cost per mile.	Average Cost per mile.	Average Cost per mile.
	Rs. a. p.	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*
Bengal - - - - - - -	1 12 –	- -	24 – –	1 10 10
Madras - - - - - - -	2 5 11	- -	17 8 3	—
Bombay - - - - - - -	2 2 –	18 2 8	26 1 6	13 1 1
North Western Provinces - - -	1 14 2	- -	23 8 –	—
Punjab - - - - - - -	1 9 –	7 9 3	15 13 6	5 5 2
Pegu - - - - - - -	- -	- -	- -	2 12 4
AVERAGE - - -	1 15 0	12 13 11½	21 6 3	5 11 4½

Railways extending over short distance not of much advantage in the conveyance of mails in India.

8. The short distance over which railways are as yet extended in various parts of India is a bar to their being of much service in expediting the transmission of the mails; wherever an extension of railway is made, it is taken advantage of by the Post Office, and the establishments on the line for the conveyance of the mails are abolished. As the train does not usually start oftener than twice, and in some instances only once, in 24 hours, a large margin of time has to be allowed in arranging for the arrival of the mails, especially during the rainy season, at the railway terminus.

Detention of the mails at railway terminus.

9. When, from circumstances beyond control, the mail is delayed in transit and reaches the railway terminus *too late*, it may be subject to detention nearly 24 and even 12 hours (according as there may be a train once or twice *per diem*); and when, in the interval, a second mail reaches the terminus, two mails of different dates are received at their destination simultaneously. So long as there are unmetalled roads and unbridged rivers (impassable sometimes for hours together) these irregularities will take place occasionally during the rainy season, in spite of every precaution to guard against them.

Special trains for the mails.

10. The irregularities in the transit of the mails, owing to their reaching the railway terminus "too late," give rise to many complaints against the Post Office, but they are unavoidable so long as it is not considered expedient to have special trains.

CHAP. III.
Post Office.

Travelling Post Offices in railways.

11. The time for introducing travelling post offices in railways does not yet seem to have arrived; no advantage commensurate with the heavy expense to be incurred would result until a greater *continuous length* of railway will have been achieved.

Sorting Post Offices.

12. During the past year, great improvement in the system of sorting letters has been introduced, and the number of sorting offices has been largely increased.

Transit lists for each Post Office.

13. Each Post Office is now furnished with a *transit* list, showing the offices for which separate mails are to be made up, so that it is no longer discretionary with the Postmaster to prepare a packet for each office for which there may be a letter.

Advantages of Sorting Offices.

14. Sorting offices have been established with the following objects in view:—

First. To save time and labour in the despatch of the mails, in their receipt and distribution at the office of delivery, and also in their transmission through intermediate offices.

Secondly. To simplify and shorten the accounts at the offices of despatch and delivery.

Thirdly. To reduce the weight and bulk of the mails.

15. No office now makes up two packets for any office which is not a sorting office, and no sorting office makes up two packets in invoicing *station* and *transit* letters for delivery at an office which is not a sorting office.

16. Letters sent from one office to another are now divided into paid, unpaid and service, with *the addresses upwards and in one direction*, so as to be read without having to turn them upside down; and when sent to a *sorting* office they are invoiced numerically without the postage being shown.

English address on vernacular or native letters.

17. In order that there may be no delay in sorting native or vernacular letters, the station to which they are directed is always written in English, with *red* ink, at the office at which they are posted when they have to be despatched to a *sorting* office. When it is recollected that there are upwards of 18 different languages in India, and that the number of clerks for sorting letters does not in any Mofussil Office exceed three, the economy of time and labour in disposing of vernacular letters by the destination being written in English can easily be imagined; but the advantage of the arrangement will be more fully appreciated on the introduction of travelling post offices in railways.

Mail not now closed until it has to be despatched.

18. By the system of sorting letters as sketched above, the mail need not now be *closed* at any office until the hour at which, *during the night or day*, it has to be got ready for despatch. This improvement in the despatch of the mail is of the utmost importance to the public, and I am glad to state that it has been effected without any increase to the establishment of the Post Office.

Reduction in the number of mails made up at each Post Office 50 to 80 per cent.

19. I estimate that a reduction in the number of packets has been effected to an extent varying from 50 to 80 per cent. at each Post Office, so that it may easily be understood how much the bulk and weight of the mail, and also the clerical work connected with the receipt and despatch of the mails, has been diminished by the establishment of sorting-officers.

Mails closed in half the time formerly occupied.

20. By the reduction made in the number of packets the time now occupied in closing and despatching, and also in receiving and distributing the mails, is less than half the time occupied formerly.

New rules for the closing, despatch, receipt, and distribution of the mail.

21. Rules for the closing and despatch, as also for the receipt and distribution of mails, have been carefully drawn up, and it may be understood how strictly they have been enforced from the circumstance of three European Postmasters having been suspended for disregarding them.

22. No excuse is accepted for neglect on the part of the Postmaster to give *personal* attendance to the despatch, and also the opening and distribution of the mails, as will be seen from the rules marginally quoted,* and I have the satisfaction of stating that I have observed a marked increase in the safety of letters, and a great decrease in the number of complaints against the Post Office since those rules were issued.

Saving in expenditure of chullans.

23. By the large reduction in the number of packets (paragraph 17), the saving in expenditure for chullans and labels in the North Western Provinces and Punjab amounts to 13,000 rupees per annum. The Postmasters General of Bombay and Madras represent the saving as only 1,024 rupees and 856 rupees respectively. I do not think that they can have so thoroughly carried out the system of sorting-offices as has been done in the North

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* Paragraphs 25 and 26 of Direction for Receipt and Distribution of the Mail:

25. If from sickness, or any other cause, the Postmaster is unable to perform the work as indicated above (which is the first and most important duty devolving on him) he must report the circumstance to the Postmaster General, otherwise he will be suspended and not permitted to return to duty pending orders of the Director General of the Post Office.

26. When the head of the office reports himself unable at any time to perform the above duty, the clerk to whom it may be assigned for the time, must attach his signature or initials to the accounts and subscribe the words "for Postmaster," or "Deputy Postmaster" as the case may be.

Western Provinces and Punjab; otherwise, I apprehend the saving in chullans and labels would be much greater.

Delay in introducing the new system of sorting letters in Bengal.

24. The Postmaster General of Bengal failed to comprehend the instructions for the new sorting arrangements and increase in the number of sorting offices, and did not give effect to them until May last. I have not yet received any information from him regarding the saving in expenditure of chullans that has resulted in the offices under his control.

New furniture for Post Offices.

25. In carrying into effect an improved system of sorting letters, it has been found necessary to supply almost every office with special furniture for ensuring greater accuracy in preparing the mails for despatch.

List of furniture for each Post Office.

26. A list showing the furniture necessary for each class of office has been prepared for the guidance of the department; there will, therefore, be no excuse if any Post Office be without a supply of furniture according to requirements.

Certain accommodation required for each Post Office.

27. In insisting on each office having a supply of suitable furniture, I have found it necessary to draw the attention of the Postmasters General to the accommodation for Post Offices, as, unless it be sufficiently large to admit of the furniture being conveniently placed, and the work satisfactorily conducted therein, no advantage would result. Some of the rules on the subject are annexed (No. 1) for information, by which it will be seen that the residence of the Postmaster under the same roof as that of the office, or in the immediate vicinity, is insisted on, as he must be at hand to perform his duty *by night as well as by day.*

Simplification and reduction in the number of books and forms of the Post Office, and saving of 50 per cent.

28. Instructions have lately been issued for simplifying and reducing the number of books and forms in use in the Post Office in view to facilitate the working of the department. A copy of my Report on the subject was submitted under Docket No. 1887 of the 30th ultimo. If the instructions be judiciously carried out, there will be greater efficiency and also greater economy in the supply of books and forms than heretofore. I anticipate a saving therefrom to the extent of 50 per cent. in addition to the saving (paragraph 23) on account of chullans and packet labels.

Banghy advice-chullans discontinued and large saving thereby.

29. It has been customary to give notice of the despatch of every Banghy parcel by an *advice*-chullan, and on receipt of the parcel to return the chullan with an acknowledgment to the office of despatch. I see no necessity, in the improved state of the department, for preparing, transmitting, and recording such documents; the practice has, therefore, been interdicted, and the saving that will result may be estimated from the fact that, in the Bombay Post Office alone, it will amount nearly to 1,238 rupees per annum.

Improvement in disposal of unclaimed and refused letters.

30. I am glad to be able to state that great improvement has resulted in the disposal of unclaimed and refused letters by the introduction of the rules referred to in paragraph 48 of my last Report. Experience has shown that they were open to amendment and simplification, and they have accordingly been revised (Annexure No. 2). Rules for the internal management of the Dead Letter Office in each Presidency (Annexure No. 3) have been issued, whereby uniformity of action will be ensured in that important department of the Post Office.

31. I look with confidence to great improvement on the working of the Post Office by the rigorous enforcement of the rules for the disposal of unclaimed and refused letters, and the internal management of the Dead Letter Office.

Loss of registered letter now a very rare occurrence in the Post Office of India.

32. A marked improvement has taken place in the safety of registered letters since the introduction of the rules (referred to at paragraph 21) for the opening and distribution of the mail, and I am glad to be able to state that the loss of a registered letter is now a very rare occurrence in the Post Office of India.

Rules relating to registered letters.

33. The rules relating to registered letters, which I lately submitted for the approval of Government, will, I trust, almost insure the safety of registered letters, provided the public adopt the precautions indicated therein, and *always seal them with wax.*

The public to blame in sending valuable articles in unregistered letters.

34. The public are to blame when they enclose bank notes, postage stamps, and other valuable articles in *unregistered* letters, as they thereby throw temptation in the way of the persons (generally native servants in India) who *post* them, and the numerous officials of the Post Office through whose hands they pass.

Sending money or valuable articles in an unregistered letter a penal offence in France.

35. In France the posting of an *unregistered* letter containing money or other valuable articles is now treated as a *penal* offence.

Unregistered letters containing money or valuable articles charged double registration fee in England.

36. By the London Post Office, when an unregistered letter is found to contain coin or other valuable articles, it is selected from the mass of letters, treated as a registered letter, and subjected to double registration fee. Experience will show whether such a measure will be necessary in the Post Office of India after the rules that I prepared will have become known, and have had a fair trial.

Letters containing valuable articles should always be registered.

37. An ordinary or unregistered letter is not supposed to be of any importance, excepting to the addressee; but the case is obviously otherwise when valuable articles are enclosed, and registration should, as a rule, *then* be resorted to.

The posting of an unregistered letter cannot be proved.

38. There are few persons not connected with the Post Office who are aware of the fact that *the posting of an unregistered letter cannot any more be proved than the despatch or delivery*, and consequently that an inquiry instituted to trace the loss of one cannot but be far from satisfactory,—hence not a few of the complaints that appear in the newspapers.

Government not responsible for loss of a registered letter.

39. The public do not seem to be generally aware that, by Section 49 of the Postal Act, Government is not responsible for, and does not guarantee, the safety of a registered letter, and that registration simply makes a letter more secure by rendering it practicable to trace it from one official to another.

Inquiry always instituted for loss of a registered letter and result reported by Postmaster General to Director General.

40. Whenever a registered letter is now lost, or made away with, the Postmaster General submits a preliminary report to the Director General, and, on completion of the inquiry, communicates the result; the officials of the Post Office are called to strict account, and, when it can be shown that the loss of a letter is owing to neglect of prescribed precautions, they *may* be required to make good any loss. In my next Report I hope to be in a position to state the number of instances of loss of registered letters. The return received for the past year is not quite reliable.

Letters insured in the French Post Office.

41. In the French Post Office there was lately, and I believe there is still, a department for *insuring* the safety of letters; it is obvious that such an arrangement necessitates (in order to prevent fraudulent claims) measures for ascertaining that the contents are really what the senders describe, and the levying of a charge increasing with, or proportionate to, the risk.

Post Office telegraph.

42. Great delay has heretofore taken place in tracing the loss or damage to parcels or packets, or any article in transit through the Post Office, especially when the loss or damage had to be traced through more than one Presidency or division of the Post Office. This defect in the working of the Post Office has now been remedied by the issue of rules regarding the despatch, receipt, and disposal of telegraph of inquiry.

43. The rules and forms for telegraphs of inquiry being equally applicable to the whole Department, it is an easy matter to ascertain where the loss of, or damage to, any article took place. The salutary effect of the rules has been apparent by a marked diminution of the number of instances in which it was formerly found necessary to issue telegraphs. No official can fail to comprehend that by the departmental telegraph irregularities are not only easily detected, but also prevented by means of it.

Abolition of "Postal Advertiser" and substitution of steam postage schedule for the Post Office of India.

44. It has not appeared that any advantage commensurate with the expense resulted in the monthly publication of the "Postal Advertiser" by the Postmaster General of Bengal, Bombay and Madras. In substitution of it I have had a schedule prepared showing alphabetically the names of the places with which there is steam communication, and the rates of postage paid on letters, papers, prices current, books, &c.

45. The schedule of steam postage fully supplies the want felt by the public, as well as by the Postal Department; and by the majority of Deputy Postmasters it is more easily comprehended than the "Postal Advertiser." It will shortly be revised, and will be found a complete guide as regards ship and steam postage. The cost of the schedule to the Department has been simply that of the paper, as the Bengal Printing Company undertook to supply the number of copies required on the condition of being privileged to publish it for their own advantage.

Saving of *Rs.* 2,533. 14. 10. by abolition of "Postal Advertiser."

46. The saving by the abolition of the "Postal Advertisers" in the three Presidencies is about *Rs.* 2,533. 14. 10. per annum, irrespective of the cost of transmission by post; the saving is, however, actually greater, as at Bombay and Madras the whole of the expense attending the publication was not, it appears, debited to the Post Office.

Official correspondence.

47. During the past year a copy of the rules proposed at paragraph 38 of my last Report, in view to the saving of weight and bulk of official correspondence, was furnished to each Inspecting Postmaster and Postmaster; they are now strictly enforced. The Postal Department has thus set the example of checking the number, weight, and bulk of official correspondence.

Saving of 50 per cent. in weight of official correspondence.

48. In my Report No. 1753 of the 30th October 1861, I pointed out how the heads of departments might easily exercise efficient check on the weight and bulk, as also on the number, of official covers sent through the Post Office, and that the reduction, which is feasible without inconvenience to the public service, is probably not less than 50 per cent.

Necessity for action of Government in reducing official correspondence.

49. Seeing that the number or weight of official covers is still on the increase, and will probably continue to increase with every improvement in the administration of the country, the necessity for action by Government in view to *minimise the weight of official correspondence* seems to me, *on financial grounds*, to be imperative, more especially when it is borne in mind that of 45,554½ miles of post road in India the mails are carried over 32,996 miles on the backs of men.

Increase of road establishment to meet progressive increase of weight of official correspondence.

50. The maximum weight carried by a runner is only 18 lbs., so that unless efforts be made to reduce the necessary weight of official covers, increase of the road establishments to meet the progressive increase in the weight of the mails will be unavoidable. Every effort should, therefore, I think, be made by every department throughout India to keep down the weight and bulk of official correspondence.

51. Heretofore the records of the Post Office have been retained for three years and then disposed of. So long as the offices were not regularly inspected, and the accounts periodically examined and passed, it was expedient to retain the records for such a length of time.

Records of Post Offices disposed of after three years.

52. The offices being now regularly inspected, the Postmasters are required to have all records (with certain exceptions) disposed of at the expiration of 18 months, or twice in every year, viz., in the months of January and July. The proceeds of sale are brought to credit in the cash account for those months; the Compiler of Accounts is thus in a position to know when to look for and check the sums realised by the sale of the old records of each office.

Records disposed of after 18 months.

53. Observing that the discretionary authority vested in Postmasters by paragraph 55 of the Post Office Manual is open to abuse, by the facility for employing extra runners unnecessarily, instructions (Annexure No. 4) have been issued, which will, I trust, render the employment of extra runners seldom or never necessary, and prevent the chance of fraud thereby in future.

Check on the charge for extra mails.

54. Prior to the establishment of the telegraph in India expresses were not unfrequently conveyed, once and oftener within 24 hours, by the fixed establishment of runners; this fact, if borne in mind by the Department, will almost entirely lead to the discontinuance of requisitions for *extra* runners whenever there is a temporary accumulation of parcels at any office. I have the conviction that extra runners will seldom or never be employed where there are trustworthy overseers working under efficient Inspecting Postmasters.

Extra runners for extra mails seldom or never necessary.

55. Having observed that pamphlets and other printed and engraved papers, weighing less than 12 tolahs, have been treated as book post packets, and forwarded by parcel mail, instructions (Annexure No. 5) have been issued for such articles being treated as newspapers, and conveyed by letter mail.

Pamphlets, &c., weighing less than 12 tolahs despatched by letter mail.

56. In making no distinction between a pamphlet or other articles under Section 7, and a packet of books under Section 12 of the Postal Act, the rate of postage being the same, viz., one anna up to 6 tolahs in the former, and one anna up to 20 tolahs in the latter case, there has not unfrequently been loss of revenue, and the public have had grounds for complaint by unnecessary delay in transit, irrespective of the risk of damage by treating articles that come under Section 7 as book post packets and sending them along with parcels by the Banghy Mail.

Loss of revenue by treating articles under Section 7 instead of under Section 12 of the Postal Act.

57. During the year under review I have had reason to observe that in more than one Presidency there has been a lax system of supervision and control, especially in conducting inquiries into irregularities and robberies connected with the Post Office.

Laxity of departmental inquiry into irregularities.

58. The want of *special* knowledge of the internal working of the Post Office renders it always difficult, and not unfrequently impossible, for the police to enter on and conduct an inquiry into a robbery connected with the Post Office with a satisfactory result.

Police unfitted to detect crimes connected with Post Office.

59. It is an easy way of disposing of irregularities or robberies in the Post Office to request a "judicial investigation," and there are few officials in the Department who are not well aware that such a request, unless attended with a searching *departmental* inquiry is, as a rule, attended with no result, owing to the difficulty of procuring special information of a reliable nature regarding the working of the Post Office.

Offences in the Post Office detected or prevented only by departmental investigation.

60. I have issued instructions (Annexure No. 6) in order to ensure rigorous departmental inquiry into every irregularity or robbery connected with the Post Office, and I trust there will not again be reason for thinking that there has been laxity in departmental supervision; the knowledge that, in every instance of irregularity or robbery, an investigation will be made by the Inspecting Postmaster, and punishment awarded departmentally whenever there are grounds to justify moral conviction of guilt of the parties against whom there is suspicion, cannot but have a salutary effect in preventing crime.

Co-operation of postal and police officers in detecting offences.

61. On the occurrence of a theft or robbery in the Post Office, the Postmasters General submit a preliminary report, and on completion of the inquiry instituted communicate the result to the Director General, who can thus easily satisfy himself that proper inquiry is made into every case, and insist on proper measures being taken for detecting as well as preventing irregularities.

Theft or robbery always reported by Postmaster General to Director General.

62. Observing that it is physically impossible for the Inspecting Postmasters, owing to the extent of their divisions, to do more than inspect each office twice in the course of the year, and that no advantage results by their constantly travelling throughout the year, instructions (Annexure No. 7) on the subject have been issued for their guidance. The time for a tour of inspection should, for obvious reasons, be selected with reference to the most favourable season of the year, or at the close of the monsoon, and before the setting in of the hot season. They will thus be travelling for six months in the year, and halting about the same time; the saving of travelling allowance may be estimated at 50 per cent., or about 4,000 rupees per annum.

Physical impossibility of Inspecting Postmasters inspecting each Post Office oftener than twice in the year, and saving of 50 per cent. travelling allowance.

63. When it may be necessary for an Inspecting Postmaster to inspect any office or road establishment beyond the usual time, it has been ruled that, if the circumstance be

Travelling allowance to Inspecting Postmasters not debited to Department

When incurred owing to neglect of duty by them or other officials of the Department.

fairly attributable to the absence of timely supervision or control, or to circumstances which it was in his power to have foreseen and prevented, or to no fault on his part, but owing to neglect of duty on the part of his subordinates, or any of the officials of another division, it will be matter for the consideration of the Postmaster General to determine whether travelling allowance should be passed or be debited to the official who, by culpable neglect of duty, had given rise to the inspection.

Inspecting Postmasters to have their head-quarters at a central or large sorting office.

64. By the new system of sorting letters and the increase in the number of sorting offices, Inspecting Postmasters find it comparatively easy to supervise and control the working of the offices subordinate to them. By fixing their head-quarters at a central or sorting office, their action will, as pointed out in the paragraph marginally quoted,* be no longer of a local nature, or confined to their own divisions, but will also be general or departmental.

The successful working of the Post Office depends on the efficiency of Inspecting Postmasters and the degree of supervision and control exercised by and over them.

65. The successful working of the Department mainly depends on the efficiency of the Inspecting Postmasters, and the degree of supervision and control exercised by the Postmasters General. *The occurrence of irregularities in any office or road establishment, or in any division of the Post Office, must be viewed as indirectly attributable to the supervising or controlling authorities. The Inspecting Postmasters have not generally been made to realise this fact, or to comprehend the responsibility attaching to them as supervising or controlling officers.*

66. There is no excuse for any Inspecting Postmaster, Postmaster, or any other official being ignorant and careless in the performance of, or unfit for his duty; and in order that it may be clearly understood that inefficiency will not be tolerated in any grade in the Department, instructions on the subject (Annexure No. 8) have been issued for the guidance of the Department.

67. The order marginally quoted, † if thoroughly comprehended by Inspecting Postmasters, will, I trust, be the means of inducing them to take a *personal* interest in the efficient working of every office and road establishment under their control.

Complaints in the Press against the Post Office.

68. The Post Office is generally a favourite topic with the Press in India. Every complaint which I have observed therein has had my attention, and I have considered it my duty to require the Postmasters General to take such notice of every complaint in the papers as after consideration of the circumstances might appear necessary, as there are generally some grounds which call for action on their part.

69. Many persons will, through the Press, give expression to grievances, real or imaginary, who would not otherwise make them known to the head of the Department, whose duty it is to remove or explain them.

70. The Press is not unfrequently useful in suggesting improvements, as well as in indicating mismanagement and irregularities in the working of the Post Office; it is, therefore, obviously a duty on the part of the officials not to disregard the criticism of the Department by the Press, however exaggerated or wrong it is occasionally.

Correspondence of the country.

71. Before commencing to analyse the correspondence of the country, I think it necessary to repeat with reference to paragraph 11 of my last Report, that in former years it was the practice of this office to estimate the number of covers for one year by taking one month's result, which was not correct. I apprehend that this mode of calculation has all along exhibited an exaggerated number in each year, and consequently a fair comparison cannot be made with returns of the year under review.

72. The subjoined statement is a continuation of that given in previous years, and shows a result at first sight unfavourable; but when contrasted with results of the year immediately before and after the introduction of the low rate of postage, it should be considered as satisfactory, inasmuch as it indicates an increase of 27,483,212, or 144·02 per cent. over 1854–55; of 17,768,288, or 61·69 over 1854–55; and of 14,263,928, or 44·12 per cent. over 1855–56.

73. From

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* Paragraph 6 of Circular No. 474 of the 12th March 1862—"When not travelling on duty, the Inspecting Postmaster must reside at his head-quarters, as *there* he will be in the most favourable position for watching the working of every office of other divisions which may send mails to it. Every irregularity, whether in his own, or in another division, or in another Presidency or Administration, should be noticed or reported to the Inspecting Postmaster of the division, or (if necessary) to the Postmaster General of the Presidency or Administration. Every official will thus be kept on the alert, and the working of the Department will be improved."

† Paragraph 10 of Circular No. 474 of the 12th March 1862—"In order to encourage emulation, and so lead to the improvement of the Department, each Inspecting Postmaster should be required to submit an annual report shewing the *success* with which each office and road establishment in his division has been managed. Such a report might be accepted as a fair criterion of the qualification of the Inspecting Postmaster for the duty of supervision and control."

PRESIDENCY.	One Year to the introduction of the ½-anna Postage in 1854-55.	1854-55.	1855-56.	1856-57.	1857-58.	1858-59.	1859-60.	1860-61.	1861-62.
Bengal - - -	4,607,316	5,890,380	6,816,144	7,538,496	8,423,448	9,300,504	9,177,492	9,054,810	9,357,518
Madras - - -	3,954,564	5,466,672	5,707,464	7,129,044	7,773,720	8,108,191	8,264,857	8,937,423	8,732,297
Bombay - - -	3,511,056	6,304,260	7,101,768	8,709,828	11,607,168	15,145,272	12,978,684	12,375,436	10,645,100
North Western Provinces	7,009,740	11,186,288	12,676,584	13,883,052	14,503,644	18,424,068	17,367,072	16,709,741	12,094,231
Punjab and Scinde -	- -	- -	- -	- -	- -	- -	- -	- -	5,348,387
Pegu - - - -	- -	- -	- -	- -	- -	- -	- -	- -	388,355
TOTAL -	19,082,676	28,797,600	32,301,960	37,260,420	42,307,980	50,978,035	47,788,105	47,077,410	46,565,888

73. From the above Statement it will be seen that the decrease in the correspondence of the whole of India is 511,522 or 1·8 per cent. as compared with the past year; and when it is compared with 1854–55 and 1855–56 the increase is remarkable, as shown in the margin. The falling off in this year may partly be accounted for by the large decrease in the native army and the reduction in the number of European troops in the country, the closing of many newspaper presses in the North Western Provinces, and circumstances which I shall hereafter explain.

Per cent. - 144·02
" - - 61·69
" - - 44·12

74. The subjoined Table shows the total number of paid and bearing letters passing through the Post Offices in one month of 1855-56, 1858-59, 1859-60, 1860-61, and 1861-62.

PRESIDENCY.	One Month in 1855-56.			One Month in 1858-59.			One Month in 1859-60.			One Month in 1860-61.			One Month in 1861-62.		
	Paid.	Unpaid.	Total.	Paid.	Unpaid.	Total.	Paid.	Unpaid.	Total.	Paid.	Unpaid.	Total.	Paid.	Unpaid.	Total.
Bengal - -	259,849	139,816	399,665	326,765	232,136	558,901	300,322	229,518	529,840	293,527	247,514	541,041	282,681	273,451	556,132
Madras - -	273,840	73,394	347,234	375,665	146,973	522,638	348,135	127,145	475,280	368,487	133,869	502,356	380,166	124,772	504,938
Bombay -	336,397	78,605	415,002	556,784	268,256	825,040	504,002	251,741	755,743	477,598	246,109	723,707	393,868	236,277	630,145
North Western Provinces.	458,988	339,885	798,873	557,842	571,972	1,129,814	496,600	566,589	1,063,189	492,840	544,662	1,037,502	354,757	415,093	769,850
Punjab - -	- -	- -	- -	-	- -	- -	- -	- -	- -	- -	- -	- -	163,190	134,914	298,104
Pegu - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	10,235	9,524	19,759
TOTAL - -	1,329,074	631,700	1,960,774	1,817,056	1,219,337	3,036,393	1,649,059	1,174,993	2,824,052	1,632,452	1,172,154	2,804,606	1,584,897	1,194,031	2,778,928
Estimate for One Year.	15,948,888	7,580,400	23,529,288	21,804,672	14,632,044	36,436,716	19,788,708	14,099,916	33,880,624	19,589,424	14,065,848	33,655,272	19,018,764	14,328,372	33,347,136

75. With that of previous year some explanation of the falling off in the correspondence may be found in the fact that paid letters, which could not be delivered, in place of being sent back to the senders whose names are written outside, in accordance with Section 43 of the Post Office Act, have been forwarded to the Dead Letter Office to be disposed of there, as will be apparent from the rules recently issued for the guidance of the Dead Letter Department.

Causes of native correspondence being generally unpaid.

76. I need not here recapitulate the causes stated in paragraph 17 of my last Report, which give rise to a large portion of the native population sending their letters bearing postage, beyond observing that the defective working of the district post consequent on the re-organization of the police throughout India must materially influence the increase. It is now a difficult matter indeed to have letters, especially such as are *unpaid*, delivered through the district post, as the police are no longer considered as available for the purpose, their special duty being incompatible with that of delivering letters and *accounting* for postage.

Probability of increase of unpaid native letters.

77. So long as the lowest rate of postage is only half an anna (the lowest in any post office in the world) and the lowest unpaid rate is only double or one anna, I apprehend that the proportion of unpaid to paid letters will rather increase than decrease, owing to the increase of correspondence between the native population of British Territory and foreign or independent states scattered throughout India (especially in the North Western Provinces, Punjab and Bombay), almost all of which, from circumstances obviously beyond control, is despatched unpaid.

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Letters by the commercial class of natives generally *paid*.

78. The commercial class of natives, almost as a rule, pre-pay their correspondence: but the lower classes, including a large floating population connected with the army, especially in the North Western Provinces, Punjab and Bombay, as a rule, send their letters unpaid; and as they are generally to the address of parties residing in obscure places, or villages in the interior of districts, it is scarcely a matter of surprise that those classes do not pre-pay their letters, when it is considered how difficult it not unfrequently is to find out the addresses, owing to the indistinctness of the address, and there being many persons of the same name in every town or village in, and many towns and villages of the same name throughout, India.

79. During the mutiny in 1857 and 1858, when the Post Office in the North Western Provinces, Central Provinces, and other parts of India, was more or less closed, or disorganized, there was an unusual increase in the proportion of unpaid to paid letters, and it is but reasonable to suppose that the distrust in the department engendered by the lower classes during that crisis has not yet quite passed away.

80. It is worthy of remark that a large proportion of the unpaid correspondence in the North Western Provinces, Punjab, Bengal and Bombay, is owing to the large number of places of pilgrimage in those provinces, to and from which a vast number of covers bearing postage is despatched, owing to the uncertainty of their reaching the addresses, who have no fixed abode. I give in the margin the names of a few of the principal places to which pilgrims resort in vast numbers at different seasons of the year.

Ajmere.
Hurdwar.
Thannessur.
Bindrabun.
Muttra.
Allahabad.
Benares.
Sarun near Kasgunge.
Gurmooktessur.
Fyzabad.
Dwarka in Goozerat.
Gya.
Juggernath.
Kangra.
Umritsur.

81. The following remarks by the Postmaster General of Bombay, in regard to the non-delivery of native letters, illustrate the difficulties experienced in disposing of many of the unclaimed native letters sent to the dead letter office:—

"There is one cause which operates largely in this Presidency, viz., the disinclination of the chiefs of native states that border the several postal divisions, to aid in any way in the delivery of letters, whether paid or bearing postage, especially the latter. They have been received back in hundreds from Kattywar and the Nizam's territory as undeliverable, and the efforts of the department cannot overcome this.

"Another cause of non-delivery is in the difficulty of reading the handwriting of the lower orders, which is, as a general rule, most puzzling and undecipherable. Such are the letters of the domestic servants, shoemakers, and other low castes, who are compelled by their profession to move about constantly; added to this, the extensive faultiness of the addresses, which are without any guide to the locality, as the name of the street or lane. In large towns where peons have to return to the Post Office to *time*, the want of these particulars occasion great delay. Letters of this description are received by thousands from Poona and Surat, and large towns."

Compulsory pre-payment of postage in India.

82. I incline to the opinion that the time for making pre-payment of all letters compulsory will have arrived, when the district will have been amalgamated with the general post, as it may then, I think, be practicable to ensure the delivery of native letters with tolerable certainty. When natives have to *pre-pay* their letters, they will be more careful in addressing them, and more likely to complain against the Post Office (which they now seldom or never do), when they have reason to consider that their letters are not delivered.

83. The single rate of postage is so small, that it can scarcely be felt even by the poorest class of natives; compulsory pre-payment would not, therefore, in my opinion, be considered a grievance, and as I have the conviction that it would lead to more certainty in the delivery of *native* letters, I should be glad to see the experiment made at the time I have indicated.

84. The number of chargeable newspapers is exhibited in the following statement, from which it will be perceived that the falling off in the number is greater than that of the previous year, and may be attributed to compulsory pre-payment of postage which took effect in January 1861:—

PRESIDENCY.	One Month in 1855–56.	One Month in 1858–59.	One Month in 1859–60.	One Month in 1860–61.	One Month in 1861–62.
Bengal - - - - - -	66,092	111,307	85,782	84,553	76,382
Madras - - - - - -	48,283	79,372	82,092	72,724	61,918
Bombay - - - - - -	45,583	167,819	107,123	92,657	65,010
North Western Provinces - -	83,494	143,500	123,672	103,623	65,247
Punjab - - - - - -	- -	- -	- -	- -	39,707
Pegu Provinces - - - - -	- -	- -	- -	- -	6,870
Total - -	2,43,452	501,998	398,669	353,557	315,134
Estimate for one Year -	2,921,424	6,023,976	4,784,028	4,242,684	3,781,608

85. From

Causes of increase of official letters.

85. From the following Table it will be perceived that the number of official letters in one month of 1861-62, has increased in all the Presidencies over the previous year. This increase is nothing more than what may be looked for with reference to paragraphs 22 to 31 of my last Report, and the number of new offices that have been opened during the year under review. It is, however, to be borne in mind (as remarked in the concluding part of the 70th paragraph of my last Report), that re-directed service letters had been lost sight of in former returns; whereas I have reason to believe that they have been included on this occasion, and consequently have considerably swelled the returns.

PRESIDENCY.	One Month in 1854-55.	One Month prior to the Introduction of the Half-anna Postage in 1854-55.	One Month in 1854-55.	One Month in 1855-56.	One Month in 1856-57.	One Month in 1857-58.	One Month in 1858-59.	One Month in 1859-60.	One Month in 1860-61.	One Month in 1861-62.
Bengal - -	72,888	87,972	88,858	94,680	88,062	91,077	101,458	110,731	124,591	142,211
Madras - -	73,106	73,474	68,423	78,327	108,773	106,223	118,076	121,246	161,261	149,382
Bombay - -	64,041	96,529	106,833	128,837	162,142	199,796	265,347	203,779	208,000	186,409
North Western Provinces.	147,770	165,767	152,242	168,116	188,661	227,551	249,580	246,155	236,971	162,903
Punjab - -	- -	- -	- -	- -	- -	- -	- -	- -	- -	103,068
Pegu Provinces -	- -	- -	- -	- -	- -	- -	- -	- -	- -	5,149
TOTAL - -	357,805	423,742	416,356	469,960	547,638	624,647	734,461	681,911	730,823	749,122
Estimate for one year.	4,293,660	5,084,904	4,996,272	5,639,520	6,571,656	7,495,764	8,813,532	8,182,932	8,769,876	8,989,464

86. The following Statement exhibits the number of chargeable and service parcels sent through the Post Offices in India in one month of 1850, 1854, 1855, 1856, 1857, 1858, 1860-61, and 1861-62.

PRESIDENCY.	1850.		August 1854.		April 1855.		April 1856.		April 1857.		April 1858.		Monthly Average of 1860-61.		Monthly Average of 1861-62.	
	Chargeable.	Service.	Chargeable.	Service.	Chargeable.	Service.	Chargeable.	Service.	Chargeable.	Service.	Chargeable.	Service.	Chargeable.	Service.	Chargeable.	Service.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal - - - -	3,417	2,226	6,510	3,045	6,150	4,603	6,373	4,173	5,878	4,109	5,963	7,547	5,918	7,479	5,438	7,179
Madras - - - -	2,839	1,520	3,787	1,200	4,876	1,393	4,983	1,975	5,121	2,120	4,778	2,180	5,188	2,278	5,058	2,538
Bombay - - - -	2,132	1,037	2,597	769	3,519	2,637	3,774	3,035	4,183	3,884	5,062	3,767	4,198	3,975	3,507	3,419
North Western Provinces	3,316	1,678	3,947	2,840	10,029	5,421	9,793	5,673	9,529	6,203	9,728	5,393	11,127	6,819	8,452	5,223
Punjab - - - -	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,848	1,698
Pegu Provinces - -	–	–	–	–	–	–	–	–	–	–	–	–	–	–	301	135
TOTAL - - -	11,704	6,461	16,841	7,854	24,576	14,054	24,923	14,856	24,711	16,316	25,551	18,887	26,431	20,542	26,604	20,192
Estimate for one Year -	140,448	77,532	202,092	94,248	294,912	168,648	299,076	178,272	296,532	195,792	306,612	226,644	317,172	246,504	319,248	242,304

87. From the above it will be apparent that the number of chargeable parcels is on the increase, whereas the service parcels have decreased as compared with the last year.

88. By paragraph 70 of my last Report it will be seen that the postage on service parcels has, up to this time, been overlooked, and that credit had not previously been obtained by the Post Office.

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89. The following Table shows the number of books, pamphlets, &c., sent by book post in one month of 1854-55, 1855-56, 1856-57, 1857-58, 1860-61 and 1861-62:—

Presidency.	One Month in 1854-55.			One Month in 1855-56.			One Month in 1856-57.			One Month in 1857-58.			One Month in 1860-61.			One Month in 1861-62.		
	Books Posted in India.	Imported Book Post Packets.	Total.	Books Posted in India.	Imported Book Post Packets.	Total.	Books Posted in India.	Imported Book Post Packets.	Total.	Books Posted in India.	Imported Book Post Packets.	Total.	Books Posted in India.	Imported Book Post Packets.	Total.	Books Posted in India.	Imported Book Post Packets.	Total.
Bengal - -	2,306	285	2,691	2,943	606	3,549	3,359	593	3,952	3,392	414	3,806	4,392	1,339	5,731	4,042	2,477	6,519
Madras - -	1,809	463	2,272	2,393	710	3,103	2,746	817	3,563	3,195	1,187	4,382	3,549	1,493	5,042	3,812	1,616	5,428
Bombay -	675	627	1,302	1,173	595	1,768	1,587	526	2,113	1,543	757	2,300	3,201	1,205	4,406	2,722	1,089	3,811
North Western Provinces.	3,365	1,497	4,862	4,616	1,356	5,972	3,984	875	4,859	3,226	1,051	4,277	7,153	2,048	9,201	5,314	1,425	6,739
Punjab - -	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2,537	1,118	3,655
Pegu Provinces.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	568	37	605
Total - -	8,155	2,972	11,127	11,125	3,267	14,392	11,676	2,811	14,487	11,356	3,409	14,765	18,295	6,085	24,380	18,995	7,762	26,757
Estimate for one year.	97,860	35,664	133,524	133,500	39,204	172,704	140,112	33,732	173,844	136,272	40,908	177,180	219,540	73,020	292,560	227,940	93,144	321,084

90. There were about 321,084 book packets this year, which exceed by 28,524 or 9·74 per cent. as compared with the previous year.

91. I give in the following Table the number of registered letters posted in one month of each year from 1854 to 1861-62. The proportion of registered letters to the whole chargeable correspondence posted during the same period is 98·18 per cent. In the Post Offices at Calcutta, Madras, and Bombay, the number of registered letters posted is nearly equal to the number posted in all the other Post Offices in India.

PRESIDENCY.	April 1855.	April 1856.	April 1857.	April 1858.	April 1859.	April 1860.	April 1861.	Average of One Month in 1861-62.
Bengal - - - - - -	6,505	10,271	12,058	12,055	13,977	17,444	16,662	15,027
Madras - - - - - -	3,994	5,470	5,931	7,951	9,265	9,076	8,690	10,129
Bombay - - - - - -	2,052	3,054	4,188	6,074	7,358	9,240	9,095	9,917
North Western Provinces - -	6,120	9,114	9,177	9,162	10,502	11,442	11,933	9,706
Punjab - - - - - -	–	–	–	–	–	–	–	3,807
Pegu - - - - - - -	–	–	–	–	–	–	–	715
Total - - - -	18,671	27,909	31,354	35,242	41,102	47,202	46,380	49,301
Estimate for one year - -	224,052	334,908	376,248	422,904	493,224	566,424	556,560	591,612

92. The subjoined Table gives the number of chargeable and service covers, including newspapers, sent for delivery through the District Post during the year 1861-62.

Presidency.	1855-56.		1858-59.		1859-60.	1860-61.	1861-62.
	Chargeable and Service Letters and Newspapers.	Paid Letters sent from Thannah to Thannah.	Chargeable and Service Letters and Newspapers.	Paid Letters sent from Thannah to Thannah.	Chargeable and Service Letters, Newspapers, and Paid Letters sent from Thannah to Thannah.	Chargeable and Service Letters, Newspapers, and Paid Letters sent from Thannah to Thannah.	Chargeable and Service Letters, Newspapers, and Paid Letters sent from Thannah to Thannah.
Bengal - -	345,931	38,498	505,212	42,748	534,540	583,255	545,915
Madras - -	648,324	317,217	969,864	518,225	1,569,128	1,089,194	1,123,560
Bombay - -	601,896	148,929	- -	- -	1,151,368	1,137,415	988,429
North Western Provinces.	590,010	151,132	905,822	232,402	1,672,625	1,178,771	860,212
Punjab - -	- -	- -	- -	- -	- -	- -	539,082
Pegu - -	—	—	—	—	—	—	—
Total - -	2,186,161	655,776	2,380,898	793,375	4,927,661	3,988,635	4,051,987

Scheme for amalgamating District with General Post.

93. At paragraph 46 of my last Report I alluded to the time having come for the amalgamation of the District with the General Post. I have communicated to the Postmasters General a scheme by which the amalgamation may easily be carried into effect. A copy of the correspondence was submitted under Docket No. 1886 of the 30th ultimo. It will be seen therefrom that the plan I have sketched may easily be carried out without risk of collision with, or inconvenience to, the district offices, and that improvement in the working of the Post Office will doubtless result by getting rid of the present division of responsibility. I am now drawing up rules for the guidance of the officials who will be entrusted with the management of the district post establishments when transferred from the charge of the district offices.

94. Without the improvements on the working of the Post Office indicated at paragraph 25, it would be a difficult matter to effect an amalgamation of the District with the General Post without great expense and considerable risk of confusion. With the realisation of the improvements I am of opinion that the amalgamation will be effected with ease, and although additional expense will have to be incurred *at first*, that it will be nearly, if not wholly, covered by expansion of the correspondence of the country and by reductions of establishments that will *subsequently* be found practicable.

95. The following Statement shows the number of unclaimed and refused letters received at, and disposed of by, the Dead Letter Offices at Calcutta, Madras, Bombay, North Western Provinces, and Punjab :—

	BENGAL.		MADRAS.		BOMBAY.		NORTH WESTERN PROVINCES.		PUNJAB.	
—	Number of chargeable letters unclaimed or refused in 1861-62.	Proportion.	Number of chargeable letters unclaimed or refused in 1861-62.	Proportion.	Number of chargeable letters unclaimed or refused in 1861-62.	Proportion.	Number of chargeable letters unclaimed or refused in 1861-62.	Proportion.	Number of chargeable letters unclaimed or refused in 1861-62.	Proportion.
The number of unclaimed *paid* letters returned to sender.	11,716	44·55	24,124	93·53	9,455	72·46	8,136	44·15	2,538	56·
The number of unclaimed *paid* letters that cannot be disposed of.	14,585	55·45	1,670	6·47	3,594	27·54	10,292	55·85	1,994	44·
TOTAL - - -	26,301	100	25,794	100	13,049	100	18,428	100	4,532	100·
The number of unclaimed *bearing* letters returned to sender	58,449	33·66	59,451	89·96	49,152	45·95	45,825	20·75	26,520	45·35
The number of unclaimed *bearing* letters that cannot be disposed of.	115,202	66·34	6,633	10·04	55,540	53·05	175,028	79·25	31,961	54·65
TOTAL - - -	173,651	100	66,084	100	104,692	100	220,853	100	58,481	100
The number of refused *paid* letters returned to sender.	105	13·96	49	6·67	167	70·76	152	39·58	539	65·73
The number of refused *paid* letters that cannot be disposed of.	648	86·04	686	93·33	69	29·23	232	60·42	281	34·27
TOTAL - - -	753	100	735	100	236	99·99	384	100	820	100
The number of refused *bearing* letters returned to sender.	12,877	24·33	27,732	98·58	28,876	65·36	29,741	26·04	19,164	45·56
The number of refused *bearing* letters that cannot be disposed of.	40,045	75·67	400	1·42	15,301	34·63	84,462	73·96	21,992	53·44
TOTAL - - -	52,922	100	28,132	100	44,177	99·99	114,203	100	41,156	100

96. The above results will give an idea of the work done in the Dead Letter Offices. It does not, however, seem quite so satisfactory as I anticipated from the introduction of the rules referred to at paragraph 48 of my last Report, but nevertheless the check established by those rules has led to more care in the delivery of letters by all Postmasters, and at the same time to the prevention of facilities which formerly existed for peculation of postage.

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97. The following is the total number of articles mis-sent from post offices during the year 1861-62 :—

Presidency.	Letters and Papers.	Packets and Parcels.	Mail and Transit Bags.
Bengal - - - - - - - -	7,604	163	3
Madras - - - - - - - - -	9,355	58	5
Bombay - - - - - - - -	19,146	437	—
North Western Provinces - - - - -	47,630	260	19
Punjab - - - - - - - - -	14,926	248	—
Total - - -	98,661	1,166	27

98. The per-centage of articles mis-sent on the number despatched is as follows:

Presidency.	Letters and Papers.	Packets and Parcels.
Bengal - - - - - - - - - - -	00·71	00·56
Madras - - - - - - - - - - -	0·11	00·43
Bombay - - - - - - - - - - -	0·15	00·31
North Western Provinces - - - - - - - -	0·38	00·18
Punjab - - - - - - - - - - -	0·27	0·37

New system of fines for checking the mis-sending of letters, &c., successful.

99. This result is satisfactory. The new system of fines referred to at paragraph 32 of my last Report has been in operation for the greater portion of the year under review, and has fully answered the purpose contemplated by its introduction. It is a decided improvement on the old system, and has led to a vast reduction in the number of covers formerly mis-sent by the officials of the Post Office. All fines are now brought to the credit of Government; the officials who detect the mis-sending of letters, packets, &c., no longer receive the fines levied from those committing such mistakes; there is thus no temptation to fraud, which, under the old system, was not of uncommon occurrence.

100. At the end of the year under notice, the staff of officers, clerks and others of the Post Office Department in each division was as under :—

DESIGNATION.	Bengal.	Madras.	Bombay.	North Western Provinces.	Punjab.	Pegu Provinces.	Total Number.
	No.	*No.*	*No.*	*No.*	*No.*	*No.*	
Director General of the Post Office of India.	1	- -	- -	- -	- -	- -	1
Compiler of Post Office Accounts	1	- -	- -	- -	- -	- -	1
Postmaster General - - -	1	1	1	1	1	Chief Inspector. 1	6
Inspecting Postmaster - - -	9	10	10	11	5	- -	45
Postmasters and deputy Postmasters.	242	139	172	192	85	7	837
Clerk (English) - - - -	331	195	198	320	Moonshies and Clerks. 124	19	1,261
Clerk (Vernacular) - - -	30		44		- -	- -	
Postmen and other servants -	656	536	449	520	196	33	2,390
Road establishment consisting of superintendent, overseers, mootsuddees, runners, bearers, coachmen, syces, boatmen and others.	3,350	3,778	3,048	6,320	716	185	17,397
Bullock train - - - -	264	- -	- -	230	278	- -	772
Total - - -	4,885	4,659	3,922	7,594	1,405	245	22,710

101. The

Complaints.

101. The total number of complaints of different kinds recorded by each of the Postmasters General are given below. In the North Western Provinces and Punjab, the complaints are very much fewer than the number in the other divisions :—

PRESIDENCY.	Well-founded.	Groundless.	Unsuccessful.	Under Inquiry.	TOTAL.
Bengal - - -	97	93	182	1	373
Madras - - -	95	81	189	41	406
Bombay - - -	121	54	186	2	363
North Western Provinces	52	22	43	6	123
Punjab - - -	42	3	24	- -	69
Pegu - - - -	—	—	—	—	—
TOTAL - - -	407	253	624	50	1,334

102. It would seem from the statements received from the several Postmasters General that the complaints consist chiefly of inquiries regarding missing or mis-sent letters, delay in delivery, and overcharge of postage on letters.

Offences by the Post Office officials.

103. I give below the number of offences which have been committed by the officials of the Post Office during the year under notice :—

PRESIDENCY.	Number of ascertained Cases of Dishonesty on the Part of the Post Office Officials.		TOTAL.
	Number of Legal Convictions.	Number of Cases Departmentally punished.	
Bengal - - - - - - - - - -	26	3	29
Madras - - - - - - - - - -	4	4	8
Bombay - - - - - - - - - -	10	14	24
North Western Provinces - - - - -	17	14	31
Punjab - - - - - - - - - -	2	1	3
Pegu - - - - - - - - - -	—	—	—
Total - - -	59	36	95

Highway robbery.

104. The number of highway robberies in this year is equal to that of the last year. In the North Western Provinces and Bombay they are less, but in Bengal and Madras their number is greater than that compared with the previous year. The number of cases is as shown in the margin, and of these 28 occurred in foreign territory. The Postmaster General in the North Western Provinces states that the frequency of the highway robberies of Banghy Mail in Rajpootana is chiefly owing to their being nothing worthy of the name of police in the several Native States therein.

Bengal -	- 10
Madras -	- 11
Bombay -	- 19
North Western Provinces	- 13
Punjab -	- 0
Pegu -	- 0
Total -	- 53

Dâk bearer's Department.

105. The receipts and disbursements on account of Dâk bearers during the two years 1860-61 and 1861-62 are shown in the following Statement ;—

PRESIDENCY.	1860-61.									1861-62.								
	Receipts.			Disbursements.			Surplus.			Receipts.			Disbursements.			Surplus.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - -	56,115	–	–	51,298	11	6	4,816	4	6	52,237	11	1	48,512	9	–	3,725	2	1
North Western Provinces.	52,098	14	4	41,636	12	7	10,462	1	9	47,264	13	10	37,819	1	11	9,445	11	11
Punjab - -	-		-	-		-	-		-	1,176	6	9	985	15	–	190	7	9
TOTAL - - *Rs.*	1,08,213	14	4	92,935	8	1	15,278	6	3	1,00,678	15	8	87,317	9	11	13,361	5	9

Staging Bungalow Fund.

106. The following Statement shows the receipts and disbursements of the Staging Bungalow Fund in Bengal and North Western Provinces during the last two years:—

PRESIDENCY.	Receipts.						Disbursements.						Surplus.					
	1860–61.			1861–62.			1860–61.			1861–62.			1860–61.			1861–62.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - -	22,756	7	5	21,852	1	7	19,036	12	8	11,763	7	10	3,719	10	9	10,088	9	9
North Western Provinces.	68,973	3	10	37,966	1	9	59,085	1	8	25,417	5	11	9,888	2	2	12,548	11	10
Punjab - -	-		-	25,189	3	8	-		-	13,169	6	11	-		-	12,019	12	9
TOTAL - - *Rs.*	91,729	11	3	85,007	7	–	78,121	14	4	50,350	4	8	13,607	12	11	34,657	2	4

107. The total number of Dâk bungalows in Bengal, North Western Provinces, and the Punjab, was on the 30th April 1862, as shown below:—

Bengal - - - - - - -	64
North Western Provinces - - -	119
Punjab - - - - - - - -	63
	246

Mail cart and parcel van.

108. The receipts derived from passengers travelling by mail cart and parcel van during the year are given below:—

PRESIDENCY.	Fares from Mail Cart Passengers.			Fares from Parcel Van Passengers.			TOTAL.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - - - - - -	14	2	–	9,207	10	6	9,221	12	6
Madras - - - - - -	2,255	5	–	-	-	-	2,255	5	–
Bombay - - - - - -	-	-	-	5,097	13	6	5,097	13	6
North Western Provinces - - -	15,599	3	6	46,075	15	6	61,675	3	–
Punjab - - - - - -	57,860	10	–	19,032	8	–	76,893	2	–
TOTAL - - - *Rs.*	75,729	4	6	79,413	15	6	1,55,143	4	–

Bullock train.

109. The total number of miles of road in Bengal, North Western Provinces, and the Punjab over which the bullock train runs, is in Bengal 300, North Western Provinces 1,100, and the Punjab 673; total, 2,073 miles.

110. The following Table shows the receipts and charges in Bengal, North Western Provinces, and Punjab, for the two years:—

PRESIDENCY.	Receipts.						Disbursements.						Surplus.					
	1860–61.			1861–62.			1860–61.			1861–62.			1860–61.			1861–62.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - - - - - -	5,59,888	13	–	5,04,388	14	6	3,88,046	5	–	2,96,605	9	8	1,71,842	8	–	2,07,783	4	10
North Western Provinces - -	9,15,462	7	10	4,65,109	6	1	6,58,382	15	11	3,18,726	12	2	2,57,079	7	11	1,46,382	9	11
Punjab - - - - - -	-	-	-	4,18,090	9	2	-	-	-	1,70,433	8	11	-		-	2,47,657	–	3
TOTAL - - - *Rs.*	14,75,351	4	10	13,87,588	13	9	10,46,429	4	11	7,85,765	14	9	4,28,921	15	11	6,01,822	15	–

111. From the above it will be observed, that there has been a falling off in the receipts by *Rs.* 87,942. 7. 1., which is apparently the effect of the reduction of the Bullock Train Establishment in the Bengal Division, and of the closing of the train between Agra and Indore during the rainy season of 1861. To the same cause is attributable the diminution of disbursements in all the divisions except the Punjab, the charges of which have been separately shown this year.

CHAP. III.
Post Office.

112. The subjoined Statement shows the number of postage labels of each denomination, sold in each of the Presidencies and Governments, and the amount realised thereon during the year under review:—

PRESIDENCY.	½-Anna Label.	1-Anna Label.	2-Anna Label.	4-Anna Label.	8-Anna Label.	½-Anna Envelope.	1-Anna Envelope.	½-Anna Note Paper.	8-Pie Label.	VALUE.		
										Rs.	*a.*	*p.*
Bengal -	3,234,774	1,632,915	531,455	547,254	190,796	21,920	16,576	44,140	97,209	509,928	7	-
Madras - -	5,107,252	890,174	233,618	297,362	33,015	19,904	7,616	16,064	76,472	340,540	1	4
Bombay - -	5,167,477	1,112,616	273,078	358,986	101,235	27,670	11,520	15,650	48,894	410,235	-	6
North Western Provinces.	4,050,104	1,047,557	196,505	289,739	29,743	87,368	24,649	75,021	35,592	313,927	-	10
Punjab - -	2,052,762	371,690	104,623	236,291	12,438	34,779	12,272	49,321	50,767	156,688	8	3
Pegu - -	101,465	108,301	27,850	35,131	12,199	960	2,128	1,056	1,518	28,602	15	6
TOTAL - -	19,713,834	5,163,253	1,367,129	1,764,763	379,426	192,601	74,761	201,252	310,452	1,759,922	1	5

Financial results.

113. The postage collections during the years 1853–54, 1859–60, 1860–61, and 1861–62 are shown in the following Table:—

—	1853–54.			1859–60.			1860–61.			1861–62.		
-	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Postage on letters and newspapers - -	17,37,743	-	5	9,08,706	3	-	9,16,421	5	6	9,21,906	7	11
Ditto on Banghy parcels - - -	2,55,127	2	6	3,26,966	5	-	3,07,444	4	7	3,32,899	2	8
Sale of postage labels - - - -	-	-	-	14,49,044	12	1	15,99,347	5	4	17,59,922	1	5
TOTAL - - - *Rs.*	19,92,870	2	11	26,84,717	4	1	28,23,212	15	5	30,14,727	12	-

114. The collections of 1861–62, it will be observed from the above, were in excess of the previous year by *Rs.* 1,91,514. 12. 7.; and when they are compared with those of 1853–54 and 1859–60, they exceed by *Rs.* 10,21,857 9. 1., and *Rs.* 3,30,010. 7. 11. respectively.

115. The subjoined Table exhibits the gross receipts of the Post Offices during the years 1860–61 and 1861–62, including the Bullock Train receipts:—

PRESIDENCY.	1860-61.			1861–62.			Increase.			Decrease.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - - -	10,41,840	6	8	11,04,990	1	1	63,149	10	5	—		
Madras - -	5,04,866	-	-	5,03,042	14	2	-	-	-	1,823	1	10
Bombay - -	6,68,479	13	7	6,58,554	5	3	-	-	-	9,925	8	4
North Western Provinces.	19,47,004	8	1	12,13,897	5	7	-	-	-	7,33,107	2	6
Punjab - -	-	-	-	8,59,185	15	3	8,59,185	15	3	—		
Pegu - - -	40,916	15	-	39,209	12	4	-	-	-	1,707	2	8
TOTAL - *Rs.*	42,03,107	11	4	43,78,880	5	8	9,22,335	9	8	7,46,562	15	4

116. I give below the Table of official postage for 1860-61 and 1861-62:—

PRESIDENCY.	1860-61.			1861-62.								
	Total Official Postage.			Postage on Letters and Newspapers.			Postage on Banghy Parcels.			TOTAL.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - - -	4,25,524	12	6	3,83,826	12	7	95,008	11	–	4,78,835	7	7
Madras - - -	4,05,965	15	2	4,45,226	13	10	40,629	4	1	4,85,856	1	11
Bombay - -	7,56,307	9	–	7,31,838	5	4	57,013	3	9	7,88,851	9	1
North Western Provinces.	7,70,384	9	–	5,18,514	12	8	92,107	9	–	6,10,622	5	8
Punjab - - -	-	-	-	4,59,459	4	10	20,524	–	–	4,79,983	4	10
Pegu - - -	26,551	11	–	22,746	1	1	1,938	5	–	24,684	6	1
Total - - *Rs.*	23,84,734	8	8	25,61,612	2	4	3,07,221	–	10	28,68,833	3	2

Increase of official postage.

117. With reference to the increase in official postage, it is to be borne in mind that it has been calculated at the rate of an anna *above* the rate heretofore charged, viz. 2 annas per tolah, as authorised by Government in consideration of the loss to the Department by the charge being made on the *aggregate* number and weight of letters, in place of being made on each letter separately, as is done with chargeable correspondence. The return includes the postage on re-directed service letters and service parcels which (as will be seen by paragraphs 85 and 88) had not previously been taken into account in the returns.

Credit not taken by the Post Office for service expresses.

118. Expresses on the public service are not now so frequently called for as formerly, in consequence of the late order of Government requiring officers to certify as to the necessity for them, but notwithstanding a considerable number are still carried for which no credit is taken by the Post Office, so that the amount of official postage shown in the accounts for the past year is *not all* that the Department is entitled to take credit for.

Official postage a legitimate credit in the accounts of the Post Office.

119. The official postage is nominal or *pro formâ,* but nevertheless the Post Office is as fully entitled to claim credit for it as for the postage realised on private correspondence sent through the Post Office; the office and road establishments are maintained as much, and not unfrequently more, for official than private correspondence.

120. On no grounds can it be justly urged that credit should not be taken by the Post Office for the *pro formâ* official postage; all *service* messages (those of the Post Office inclusive) sent by telegraph are paid in cash, and it is only because it is not considered expedient that *cash* payment is not made to the Post Office by each Department for the postage incurred in the conveyance of its service letters.

Official postage *paid* by Departments in England.

121. In England the postage on service letters is paid in cash by each Department, so that the credits thereof are real, no portion of them being nominal or *pro formâ.*

122. The following Statement shows the increase and decrease in each item of receipt under its respective heads:—

——	1860-61.			1861-62.			Increase.			Decrease.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Total postage -	28,25,726	1	5	30,14,727	12	–	1,89,001	10	7	—		
Bullock train -	11,56,976	9	8	11,46,248	11	2	-	-	-	10,727	14	6
Mail cart and passenger van.	1,39,064	6	6	1,55,143	4	–	16,078	13	6	—		
Fines and savings -	63,245	9	6	48,743	3	10	-	-	-	14,502	5	8
Miscellaneous -	18,095	–	3	14,017	6	8	-	-	-	4,077	9	7
Total - - *Rs.*	42,03,107	11	4	43,78,880	5	8	2,05,080	8	1	29,307	13	9

123. The

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Post Office.

123. The subjoined Statement gives the gross disbursements of the Post Offices in India during the years 1860-61 and 1861-62:—

—	1860-61.	1861-62.	Increase.	Decrease.
	Rs. *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*
Bengal - - -	10,40,908 7 11	10,36,718 11 4	- - -	4,189 12 7
Madras - - -	7,57,347 10 4	7,17,749 10 6	- - -	39,597 15 10
Bombay - -	12,27,144 13 2	10,14,010 1 –	- - -	2,13,134 12 2
North Western Provinces.	18,92,594 – 2	11,44,565 – 5	- - -	7,48,028 15 9
Punjab - - -	- - -	7,34,338 8 4	7,34,338 8 4	—
Pegu - - -	61,509 3 10	62,940 11 4	1,431 7 6	—
Director General of the Post Office.	42,510 13 –	38,153 14 8	- - -	4,356 14 4
Compiler of Post Office Accounts.	- - -	20,446 7 10	20,446 7 10	—
Total - - *Rs.*	50,22,015 – 5	47,68,923 1 5	7,56,216 7 8	10,09,308 6 8

124. The disbursements of the Post Offices in India during the year under review and the previous year are given below:—

Heads of Charge.	1860-61.	1861-62.	Increase.	Decrease.
	Rs. *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*
Salaries - -	9,44,628 3 9	6,11,898 2 8	- - -	3,32,730 1 1
Office establishment	3,93,353 10 4	5,97,218 8 1	2,03,864 13 9	—
Road establishment	8,25,339 1 7	8,51,244 2 3	25,905 – 8	—
Contingent charges	3,40,274 1 2	2,35,476 5 10	- - -	1,04,797 11 4
Bullock train -	9,92,966 9 8	7,95,220 2 4	- - -	1,97,746 7 4
Mail cart - -	13,96,595 14 7	15,27,286 3 4	1,30,690 4 9	—
Bounty money -	2,015 11 –	4,008 3 –	1,992 8 –	—
Temporary establishment.	64,678 5 9	61,528 14 8	- - -	3,149 7 1
District post establishment.	- - -	23,977 12 3	23,977 12 3	—
Miscellaneous -	25,672 1 2	49 3 6	- - -	25,622 13 8
Repairs and construction of buildings.	7,306 1 9	11,344 12 5	4,038 10 8	—
Conveyance of mails	- - -	30,866 10 8	30,866 10 8	—
Pension - -	29,185 3 8	18,804 – 5	- - -	10,381 3 3
Total - - *Rs.*	50,22,015 – 5	47,68,923 1 5	4,21,335 12 9	6,74,427 11 9

125. The following statement exhibits the financial results with and without the postage on official correspondence and Banghy parcels, adding the Indian share of steam postage due by the London Post Office, and deducting the steam postage due to the London Post Office:—

Presidency.	Gross Receipts.	Indian Share of Steam Postage due by the London Post Office.	Total.	Deduct Steam Postage due to the London Post Office.	Net Receipts.	Deduct Gross Disbursement.	Deficit.	Official Postage.	Surplus.
	Rs. *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*
Bengal - -	11,04,990 1 1	47,977 – 8	11,52,967 1 9	1,89,696 7 2	9,63,270 10 7	10,40,485 7 1	83,214 12 6	4,78,835 7 7	3,95,620 11 1
Madras - -	5,03,042 14 2	21,115 6 4	5,24,158 4 6	28,423 15 2	4,95,734 5 4	7,27,516 6 3	2,31,782 – 11	4,85,856 1 11	2,54,074 1 –
Bombay -	6,58,554 5 3	1,24,213 10 7	7,82,767 15 10	2,47,827 5 11	5,34,940 9 11	10,23,776 12 9	4,88,836 2 10	7,88,851 9 1	3,00,015 6 3
North Western Provinces.	12,13,897 5 7	- - -	12,13,897 5 7	- - -	12,13,897 5 7	11,54,331 12 2	Surplus. 59,565 9 5	6,10,622 5 8	6,70,187 15 1
Punjab - -	8,59,185 15 3	- - -	8,59,185 15 3	- - -	8,59,185 15 3	7,44,105 4 1	Surplus. 1,15,080 11 2	4,79,983 4 10	5,95,064 – –
Pegu - -	39,209 12 4	- - -	39,209 12 4	- - -	39,209 12 4	72,707 7 1	Deficit. 33,497 10 9	24,684 6 1	Deficit. 8,813 4 8
Total - *Rs.*	43,78,880 5 8	1,93,306 1 7	45,72,186 7 3	4,65,947 12 3	41,06,238 11 –	47,68,923 1 5	6,62,684 6 5	28,68,833 3 2	22,06,148 12 9

Audit and account of the Post Office of India by a special officer of the Department.

126. Before closing this Report, I must remark that the most important change that has taken place in the Department during the year under review is the transfer of account and audit from the Postmasters General and Civil Paymasters to an officer specially selected for the combined duty under the designation of "Compiler of Post Office Accounts."

127. All Post Office accounts and bills are submitted at the close of each month to the compiler, who, after examining and checking them, submits to the Auditor General of India a consolidated account for each Presidency.

128. The accounts of the Post Office cannot be properly examined in detail, excepting by an officer *practically* acquainted with the working of the Department, inasmuch as the duty does not consist in simply comparing the debits and credits in the body of the account with the vouchers, as has been the practice in the offices of Deputy Auditors and Accountants General, but also includes a careful examination of the entries on the *reverse* of the cash accounts, which, to some extent, are the abstracts of several registers kept in the Post Office.

129. The above details not only show the extent of transactions of each post office in its several departments, but at the same time form a fair criterion of the state of working of each office, and the degree of interest taken by each Postmaster in the performance of his duty.

130. It is obvious that an officer unacquainted with the practical working of the Department would not be able to do more than compare the result shown in the memoranda, on the reverse of the cash account, with the entries in the body thereof, and could not judge of the causes of any extraordinary increase or decrease in the receipts under different heads or deductions under the head forward postage, or postage on articles sent to the Dead Letter Office, as these items vary from time to time according to the seasons of the year and other circumstances well known to such as Mr. Brown (the present compiler), who has not only had charge of a large and important post office, but has also been entrusted with the duty of supervision and control of road establishments in the capacity of Superintendent of the Mail and Bullock Train Establishment and Inspector of Post Offices.

131. The accounts were nearly as carefully checked when under the Postmasters General as they are now under the compiler, yet there was great room for improvement, the more so as the Postmaster General, from the administrative nature of his duty and frequent absence from his head-quarters, could not devote that degree of attention to the account branch of his office which was necessary.

Advantages of audit and account by an officer practically acquainted with the working of the Post Office.

132. I am not over-estimating the advantage resulting from a central office of account under a special officer and suitable establishment, working under the supervision and control of the Director General of the Post Office, when I affirm that besides uniformity of practice in the account branch, a wholesome check on the charges of the Department is ensured, as will be apparent from the following remarks:—

1st. The Compiler of Post Office Accounts has instructions to bring to notice any unusual or extraordinary charges, or any disproportion in the rates of one division when compared with those of another, whereby the Director General is enabled to inquire into the circumstances, and if not explained satisfactorily, to effect the necessary reductions.

2d. The compiler also checks the rates of pay allowed to officials of the same class in the several divisions of the Post Office in India, so that any remarkable differences are at once noticed, and unless accounted for by local circumstances, measures are taken to ensure uniformity, whereby the Department benefits.

3d. The compiler also notices any inordinate increase by any office in the deductions on account of postage on letters re-directed or sent to the Dead Letter Office, and calls the Postmasters to account, which cannot but ensure great care and attention to duty on the part of those officials.

4th. By a glance at the Rules (Annexures Nos. 2 and 3) for the disposal of unclaimed and refused letters, and for the internal management of the Dead Letter Office, it will be easy for any one to comprehend the extent of pressure that the compiler has it in his power to exercise in ensuring accuracy of account, and preventing peculations in the unclaimed and refused letter department of the Post Office throughout India.

5th. The circumstance of the compiler acting under the control and with the support of the Director General, carries great force with it, makes every Postmaster feel his responsibility and attend to the correct preparation and punctual submission of his accounts.

133. The above advantages could not be realised to their full extent had the accounts remained under the Postmasters General, and much less if under the local Deputy Accountants and Auditors General.

134. To the scrutiny and check carefully and vigilantly exercised by the compiler is in no slight degree to be attributed the increase in the receipts (paragraph 122) in all the departments of the Post Office.

135. The increase under the head "Letter and Parcel Postage," notwithstanding the compulsory pre-payment of postage on newspapers, is especially satisfactory. A marked increase in the receipts was observed so soon as the rules for the opening and distribution of the mail took effect (paragraph 22), and still greater increase followed the introduction of the rules for the disposal of unclaimed and refused letters.

(signed) *G. Paton*,
Director General of the Post Office of India.

APPENDICES to the REPORT on the Operations of the POST OFFICE of *India*, for the Year 1861-62.

APPENDIX NO. I.

INSTRUCTIONS regarding the Accommodation of POST OFFICE, including the Residence of a Postmaster.

IT is obvious that unless the accommodation be suitable, it will be impossible to have the necessary articles of furniture supplied for the working of the office.

The Post Office should always, if possible, be held in one room sufficiently large to admit of the several articles of furniture being conveniently placed, and the work satisfactorily conducted therein.

As a rule the Deputy Postmaster should reside under the same roof as that of the Post Office, and if that be not practicable, he must have a residence for himself and his family also close by, or in the immediate vicinity, so as to be at hand to perform his duty when necessary, by night as well as by day.

It is to be observed that a verandah is included in the plan for the Post Office, as it is very essential for the convenience of the public in making references, posting letters, parcels, &c. In renting a building for the Post Office all the accommodation set forth in the annexed plan must, as far as possible, be obtained, and care should be taken to have the office in as centrical and convenient a position as possible for the public.

In order that the office be kept clean, you will require the Deputy Postmaster to have it white-washed at the close of the rainy season. Where the materials for white-washing may not be available, the *cheknee muttee* of the country will answer as a substitute.

(signed) *G. Paton*,
Director General of the Post Office of India.

APPENDIX NO. II.

RULES for the Disposal of REFUSED and UNCLAIMED LETTERS, NEWSPAPERS, and PARCELS.

1. THE speedy conveyance and delivery of letters is the *main* object of the Post Office.

2. The Dead Letter Office, by showing the number of undelivered letters, may be accepted as a fair index of the efficiency of the Department, and the degree of success attending the exertion of each Postmaster.

3. The Postmaster who has his heart in his work will spare no exertion in effecting the delivery of letters promptly and safely, and will point to the absence of complaints from the public, and the small number of letters sent by him to the Dead Letter Office, as evidence of his official qualifications.

4. A list of unclaimed letters and parcels must be prepared alphabetically every *Monday*, and hung up in a conspicuous place in, or, if practicable, outside, the Post Office. It must be corrected daily, by striking off such covers as have been delivered, and adding those that are unclaimed.

5. All unclaimed covers, with or without the name of the sender written outside, must after having been retained for three weeks, be sent to the Dead Letter Office, *unless there be special reasons* for their being detained any longer.

6. Letters which cannot be delivered, owing to the death of the addressees, must be

retained for three weeks in the Delivery Office, in order to give the representatives of the deceased an opportunity of claiming them.

7. All covers that have to be forwarded must be re-directed by the Postmaster in his own handwriting before being entered in the Nominal Register and made over to the Despatching Department.

8. All remarks on unclaimed letters, papers and parcels, such as "not known," "not found," "gone away," "deceased," &c., &c., must be made by the Postmaster after inquiry of the delivery peon, whose signature to such effect must be attached on the cover.

9. No covers should ever be re-directed and forwarded without instructions from the addressees (or senders), or *reliable information*, especially as regards native letters, such as to justify the Postmaster forwarding them.

10. A Chullan (form annexed) must be forwarded to the Dead Letter Office, along with each despatch of unclaimed letters, showing the gross number of paid and service covers, and the number, weight, and postage of unpaid covers. The Chullan should be consecutively numbered, beginning with the month of May, and when receipted they must be returned to the Office of Despatch, in view to their being submitted as *vouchers* with the Cash Account to the Compiler of Post Office Accounts.

11. Provision is made for unclaimed and refused parcels being entered in the Mail Chullan, whereby the number of vouchers to be checked in the Dead Letter Office, and also in the Office of Compiler of Accounts, will be diminished. Care must be taken to despatch such parcels on the 3d, 10th, or 18th of the month, so that they may reach the Dead Letter Office in time to admit of the Chullan being receipted and returned to the Office of Despatch *before the close of the month.*

12. All covers that are refused, illegibly addressed, or without any address, should be sent to the Dead Letter Office, along with the first packet of unclaimed covers.

13. The refused and unclaimed letters must, after being *faced,* be put up in separate bundles and labelled, care being taken that the service, paid, and unpaid (of each class) are tied separately, in order that their comparison with the entries in the Chullan may be facilitated in the Dead Letter Office.

14. When paid letters and newspapers, re-directed at the instance of the Postmasters, without written instructions from the senders or addressees are refused on account of the bearing or forward postage, or are unclaimed, they should be forwarded to the Dead Letter Office, whence they will be returned *free,* as the bearing or forward postage cannot, under such circumstances, be legally demanded from the senders.

15. Disbursing Offices must forward their unclaimed and refused letters on the 3d, 10th, 18th, and 25th of each month to the Dead Letter Office.

16. Subordinate Offices will forward their refused and unclaimed covers to the Dead Letter Office, on the 5th and 20th of each month.

17. The Chullan returned by the Dead Letter Office to subordinate Post Offices will be submitted as *vouchers,* with their cash accounts, to their respective disbursing offices, which, after comparing the amount noted therein with the deductions in the postage account, will transmit them to the Compiler of Post Office Accounts.

18. The postage shown on unpaid covers in the Chullans sent to the Dead Letter Office must correspond with the entry thereof in the register of letters re-directed. When corrections are made in the Chullan at the Dead Letter Office, a note thereof must be made in the register of re-directed covers, so as to ensure the reductions made in the postage account, corresponding with the total of the Chullans for the month.

(signed) *G. Paton,*
Director General of the Post Office of India.

Appendix No. III.

Rules for the Internal Management of the Dead Letter Office.

1. The clerks entrusted with the charge of the Dead Letter Office must, in accordance with Clause 2 of Section 44 of the Post Office Act of 1854, be sworn to secrecy, or not to divulge the contents of any letter opened by them.

2. The head clerk of the Dead Letter Department will, in the presence of the other clerks of the office, open the packets one by one, and compare their contents with the Chullan (form annexed), which he will receipt, stamp and then hand over with the letters to another clerk, to be entered in the Receipt Register.

3. Any discrepancy in the entry on the Chullan must be corrected in *red* ink by the head Clerk, and the Postmasters of the Despatching Offices held responsible for making

corresponding alterations in their nominal register of letters re-directed, &c., so that the reductions in their cash account, on account of postage on bearing covers sent to the Dead Letter Office, may correspond with the amount acknowledged by the Dead Letter Office.

4. After the necessary entry has been made in the Receipt Register (form annexed) the Chullans should be folded up, addressed, and placed in the appropriate compartments of a sorting almirah, and sent at the close of the day to the Post Office, in view to being returned to the Despatching Office.

5. The letters received from each office must be carefully examined, and such covers as are to be returned to the sender or forwarded to the addressees taken out and (after being re-directed) arranged in the appropriate compartments of the sorting almirah; the remaining covers should be tied up in a bundle and placed with other similar bundles of the day in the record almirah. The date of receipt and the name of the Despatching Office must be noted on each bundle in view to facilitate reference.

6. A note of the number of covers disposed of should be made in the Receipt Register against each office whence the letters were received.

7. It is desirable to be able to show the number of letters posted with an illegible address, and also without any address at all; a memorandum of the number of such covers must be kept in the Dead Letter Office in view to be shown in the Annual Report on the Post Office.

8. Registered letters, found in the packets received from the several offices, will be handed over for entry in the Parcel Register, and disposed of in the manner hereafter pointed out.

9. Every exertion must be made by the Establishments of the Dead Letter Office in endeavouring to effect the delivery of letters to the addressees, or the return of them to the senders. The Civil and Army Lists should be referred to, and on the residence of the addressee or sender (as the case may be) being ascertained, the letters should be re-directed or put in fresh covers, and the bearing postage (if any) marked thereon.

10. While it is an object to have letters forwarded to the addressees, or returned to the senders, it is to be borne in mind that no covers should ever be sent from the Dead Letter Office without a reasonable hope of its reaching the addressees or the senders, as the case may be.

11. Refused and unclaimed covers despatched from Post Offices situated in other Presidencies will be separated and forwarded to the Dead Letter Office of the Presidency wherein they were posted.

12. Refused and unclaimed letters posted in England, the British colonies, and foreign countries, are to be returned unopened, after being kept in deposit for three months.

13. Unclaimed and refused newspapers which have been imported are not to be returned, but disposed of as waste paper soon after receipt at the Dead Letter Office in accordance with the rules of the Department.

14. Covers, whether refused or unclaimed, the address of which is written outside, should not be opened in view to be returned to the sender, unless it is found necessary to seek for further information respecting the sender than can be found outside the covers.

15. Letters sent (bearing postage) by public officers in their official capacity to individuals on their private affairs should, when refused by the addressees, be returned to the senders free of charge.

16. As public officers are required to receive letters superscribed "on the public service only," and pay any bearing postage thereon, in consequence of the absence of a frank, or being irregularly franked, no such letters should be sent to the Dead Letter Office unless the addressee cannot be found. In the event of such letters being refused and forwarded to the Dead Letter Office, they should be sent to the Postmaster General, in view to his calling on the addressee to pay the postage under the orders of Government, dated 16th July 1855.

17. Quasi-service covers, charged with postage in consequence of their being franked by an unauthorised officer, should, when refused by the addressee, be forwarded to the sender, and the postage realised from him.

18. Any infringement of the rules for the disposal of unclaimed and refused covers, or irregularity in the despatch of them to the Dead Letter Office, should at once be brought to the notice of the Postmaster General, in order that he may take immediate action thereon.

19. Whenever any valuable articles, such as bank notes, cheques, stamps, &c., are found in a letter, the clerk by whom the cover is opened should at once take it to the head clerk, who, after carefully comparing the contents with the advice, will have it entered in the Parcel Register, and then make over the enclosures to the party entrusted with the custody of such articles, taking his receipt for the same in a memorandum book to be opened for the purpose. The entry in the Parcel Register should be attested by the head clerk, and then brought to the notice of the officer in charge of the Dead Letter Office, who will add his own initials thereto.

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20. In the event of a cover containing property being instantly disposed of, by its being considered advisable to forward it to the addressee or sender, the head clerk will put it in a fresh cover, close and seal it (with his own hands), and also make the necessary remark opposite to the entry in the Register. In order to ensure the safe transmission of the cover, the sender or addressee (as the case may be) should, if practicable, be communicated with in view to his or her instructions being received for its being forwarded by the Parcel Mail, or as a registered packet by Letter Mail.

21. The sorting almirah for the Dead Letter Office should be constructed on the principle of the preliminary (transit) sorting almirah with as many compartments as there are Dead Letter Offices in India; and also two for the Station Post Office, one being for sorted, the other for station letters.

22. All letters that can be disposed of at once will be sorted in the above almirah, and at the time of closing the mail the covers intended for delivery in the station should be invoiced in the ordinary manner in a Mail Chullan; those intended to be forwarded to other stations should be put up in a separate packet (marked sorted), and those intended for Post Offices in other Presidencies should be put up in a separate packet addressed to the Dead Letter Office appertaining thereto. The packets should be entered in a Delivery Book, and the receipt of the Postmaster should be taken thereon. The Postmaster will treat the letters that are to be forwarded to other stations as "sorted" or in transit, as they cannot be entered as posted at, or despatched from, his office without the returns of such covers being thereby rendered fictitious.

23. Books, pamphlets, and parcels are to be disposed of in the same manner as letters. They will be entered in detail in a separate register (form annexed); and, unless disposed of on the day of receipt, they must be kept in charge of a trustworthy official in an almirah under double lock and key (of different dimensions), and disposed of by auction if not claimed within a year.

24. It is not necessary to open such parcels as can be immediately disposed of, but those which are kept in deposit at the Dead Letter Office, and of the delivery of which there is little or no hope, should invariably be opened in the presence of the head clerk (or Postmaster), and their contents entered in the Register before being placed under double lock and key in the almirah provided for their safety.

25. A register, very nearly similar to the Parcel Register will have to be kept by the party entrusted with the custody of parcels and letters containing valuable property.

26. The record almirah should contain 16 compartments sufficiently large to admit of two bundles (that is to say, letters received in the course of *two days*) being put up in each. At the end of the month the whole of the bundles (for that period) should be transferred to another almirah, so that the record of each month may be kept apart undisposed of *monthly* after the expiration of 12 months from the date of receipt at the Dead Letter Office.

27. To facilitate the tracing of unclaimed letters addressed in English, a separate almirah containing 26 pigeon-holes (marked alphabetically) should be provided for sorting them, such covers must be separated from those put up in the daily bundles as remaining undisposed of.

28. The dated Dead Letter Office stamp on the above covers will facilitate the separation of them for the purpose of being forwarded (to England or elsewhere after the expiration of three months) or destroyed after they have remained a year in the Dead Letter Office.

29. The following is a list of books and other articles to be kept in the Dead Letter Office according to requirements:—

Books.

1. Register of letters and papers received.
2. Ditto of parcels, registered letters and books received.
3. Receipt Book to be kept up by the official having the custody of parcels, &c.
4. Scales for weighing letters and parcels.
5. Dated Dead Letter Office stamp.

Articles.

1. A large table on which covers are to be opened and disposed of in the presence of all the Clerks.
2. Almirah for daily record of covers received.
3. Ditto for monthly ditto.
4. Ditto for sorting covers.
5. Ditto, with double lock and key for the safe custody of parcels.
6. Ditto ditto for sorting English letters.

(signed) *G. Paton*,
Director General of the Post Office of India.

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Appendix No. IV.

From *G. Paton*, Esq., Director General of the Post Office of India, to the Officiating Postmaster General, Madras, No. 3181; dated Camp Lahore, 2 April 1862.

In reply to your letter No. 362 of the 15th ultimo, I beg to observe that it is an easy matter for Postmasters or Establishments of two or more Post Offices, to collude in the employment of extra banghy-burdars or coolies for the conveyance of banghy parcels, on the strength of the discretionary authority vested in them by paragraph 55 of the Post Office Manual. But it is by no means an easy matter for the Postmaster General to exercise proper check in such cases, or to prevent fraud resulting thereby. I am of opinion that it is seldom or never necessary to employ extra banghy-burdars or coolies, provided the Postmasters exercise sound discretion in retaining service parcels, and forwarding them when practicable by the fixed Road Establishment. I need scarcely remark that it is an easy matter to make an extra despatch occasionally, and so clear off an accumulation of parcels, and it is equally easy for the Postmasters to do so by means of the fixed establishments, and at the same time *charge* for so doing. The Overseers of the Road Establishment might or might not be cognizant of the practice of fraud in such cases. I shall feel obliged by your reconsidering the point at issue and favouring me with your opinion. When extra banghy-burdars or coolies are actually necessary, it might be advisable to require that the Inspecting Postmaster should satisfy himself of the *necessity*, and to countersign the bill with a declaration of his having personally satisfied himself of the employment of extra men having been found indispensable. A circular letter, as indicated above by you for the guidance of your subordinates, might, I think, be attended with the best results.

Circular No. 494.

Copy forwarded to other Postmasters General for information and guidance.

(signed) *G. Paton*,
Director General of the Post Office of India.

Camp Kurnal, 12 April 1862.

Appendix No. V.

Circular No. 43.

From *G. Paton*, Esq., Director General of the Post Office of India, to the Postmaster General, Madras; dated Camp Nynee Tal, 18 July 1862.

Observing that pamphlets and other printed and engraved papers, *weighing less than 12 tolahs* are not unfrequently treated as book post packets under Section XIV. and forwarded *by Parcel Mail*, I have the honour to draw your attention to Section VII. of the Post Office Act, and to request that you will instruct Postmasters to charge the above articles at newspaper rates (unless superscribed by book post), also to invoice them under the head of "Newspapers" in the letter Chullan and send them *by Letter Mail.*

2. It is obvious, however, that, if not exceeding six tolahs in weight, and prepaid by a stamp of one anna, a pamphlet, though superscribed by "Book Post," should be treated as a newspaper and conveyed by the Letter Mail.

3. By treating articles that come under Section VII. as book post packets, they are subjected to unnecessary delay in transit, besides risk of damage by being put up along with parcels for transmission by the Banghy Mail.

4. In making no distinction between a pamphlet or other article chargeable under Section VII. and a packet of books under Section XII., the rate of postage being the same, viz., one anna up to six tolahs in the former, and one anna up to 20 tolahs in the latter case, there is not unfrequently loss of revenue.

5. Postmasters should draw the attention of the public to the prepayment of articles sent through the Post Office under Section VII. by means of stamps at the rate of an anna for every six tolahs, or the fraction of six tolahs, in order that they may not be treated as insufficiently paid, and charged with the deficient postage and a fine equal to a single rate or one anna.

Appendix No. VI.

Circular No. 486, dated 2 April 1862.

From *G. Paton*, Esq., Director General of the Post Office of India, to the Postmaster General, Madras, No. 3113a; dated Camp Umballa, 26 March 1862.

With reference to the correspondence received with your letter No. 349 of the 7th instant, I beg to observe that there appears to be grounds for the severe reflection (as per margin*) by the Assistant Magistrate, Mr. Hooper, against the Postal Department, inasmuch as it is the duty of the officials concerned promptly to enter on and vigorously conduct a departmental inquiry, irrespective of any judicial investigation that may at the same time or subsequently be undertaken or found necessary. I am of opinion that inquiries by the police in respect to robberies connected with the Post Office are generally ineffectual, unless assisted or directed by postal officials; and unless it can be shown that they have zealously aided or assisted, they may be considered as having culpably neglected their duty.

2. It is an easy way of disposing of robberies in the Post Office to request "a judicial investigation," and there are few officials of any experience in the Department who are not aware that such a request, unless attended with or followed by a searching departmental investigation, is, as a rule, attended with no result, owing to the difficulty in procuring the special evidence of a reliable nature that is necessary for the conviction of the culprits.

3. There can be no doubt that on the occurrence of a robbery, or any irregularity in the Post Office, a departmental investigation should invariably be instituted, irrespective of any inquiry that may be entered on by the police or by a magistrate, more especially as punishment can always be awarded departmentally whenever there is strong suspicion or moral conviction; whereas, in a judicial investigation, punishment cannot be inflicted unless there be legal evidence sufficient to establish proof or conviction, which is seldom the case in robberies effected by officials of the Post Office.

4. It is desirable that every official in the Post Office should be aware that in every instance of irregularity or robbery connected with the Post Office, a departmental inquiry will be made, and that punishment shall be awarded departmentally, when it does not appear expedient to transfer the case for judicial investigation.

5. I shall be glad to know whether any departmental inquiry was made, or whether any assistance was given by the officials of the Department in the instances referred to by the assistant magistrate; and if no departmental inquiry was made and no assistance given by the Officials of the Department, I shall feel obliged by your favouring me with the names of the officials who so far failed in their duty.

Appendix No. VII.

Circular No. 474.

From *G. Paton*, Esq., Director General of the Post Office of India, to the Postmaster General, Madras; dated Camp Agra, 12 March 1862.

As I observe that it is physically impossible for the Inspecting Postmasters to visit or inspect each office quarterly, and that much time is wasted and expense unnecessarily incurred by some of the Inspecting Postmasters making it a practice to be travelling throughout the year, I request that the inspections of each Office of Road Establishment may in future, as a rule, be limited to two in number.

2. The Post Offices which are of small importance, remotely situated or difficult of access, need not be inspected more than once in the year; such offices should be indicated for the guidance, and not left to the discretion of the Inspecting Postmaster.

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* I must, in conclusion, remark that very little assistance has been offered by the local officers of the Post Office Department in throwing light on these cases. The regular form gone through is for the Inspecting Postmaster to enclose a letter from the Deputy Postmaster, stating that a robbery has taken place, and requesting that "the case may be judicially investigated." The form of these letters never varies, and they never contain a single suggestion which the Inspector's knowledge of the working of the Post Office Department might enable him to offer. It is the opinion of all those with whom I have communicated on the subject that the Post Office requires more vigorous local supervision.

3. The time for the tour of inspection should, for obvious reasons, be selected with reference to the most favourable season of the year for travelling, which would be at the close of the monsoon and before the setting-in of the hot season. Paragraph 163 of the Post Office Manual should, therefore, be altered as per margin.

For full report, &c., read "twice in the year;" and for forms of quarterly report, read "form of report."

4. It should be impressed on the Inspecting Postmaster that, if qualified for his duty, he will seldom or never have occasion to visit any office beyond the usual time, as the exercise of proper supervision and control will prevent the occurrence of irregularities; the circumstance of having to inspect an Office or Road Establishment more frequently than twice in the year might be fairly assumed as an indication of inability to control his subordinates.

5. The Inspecting Postmaster must have his Headquarters at the most central or convenient Post Office for exercising supervison in his division. It is obvious that a Sorting Office should, if possible, be selected; but it must be fixed by you, and not left to the choice or convenience of the Inspecting Postmaster.

6. When not travelling on duty, the Inspecting Postmaster must reside at his Headquarters, as there he will be in the most favourable position for watching the working of every office in his division, as well as that of every office of other divisions which may send Mails to it. Every irregularity, whether in his own or in another division, or in another Presidency or Administration, should be noticed or reported to the Inspecting Postmaster of the division, or (if necessary) to the Postmaster General of the Presidency or Administration. Every official will thus be kept on the alert, and the working of the Department will be improved.

7. As a rule, the Inspecting Postmaster must conduct his duty at the Post Office, and be present at the time of receipt and despatch of the Mails; as it is then, and then only, that he can satisfy himself as to the accuracy with which the Mails are disposed of.

8. Each inspection of a Post Office should be thorough, and such as to detect any irregularity. Particular inquiry should be made as regards the habits and character, as also the antecedents, not only of the Postmaster, but also of every official subordinate to him, so that no one who is not respectable, or who does not command confidence, may be found in or connected with the Department.

9. The duty of the Inspecting Postmaster is not confined to the inspection of the accounts and working of the Post Office, inasmuch as he ought to consider it incumbent on him to instruct his subordinates and satisfy himself that each thoroughly understands the duty entrusted to him. There is no excuse for any Postmaster being ignorant of, or unfit for, the proper performance of his duty.

10. In order to encourage emulation and so lead to the improvement of the Department, each Inspecting Postmaster should be required to submit an Annual Report showing the success with which each Office and Road Establishment in his division has been managed. Such a Report might be accepted as a fair criterion of the qualification of the Inspecting Postmaster for the duty of supervision and control.

Appendix No. VIII.

Instructions regarding the Removal of Officials who are incorrigibly careless or incompetent.

When a Peon, Clerk, Deputy Postmaster, or Inspecting Postmaster shows himself to be careless, negligent, or incompetent, he should be advised to tender his resignation, in view to his not being subjected to the disgrace of removal or dismissal. I do not think that any official who is careless, negligent, or incompetent should be retained in the Deparment beyond the time that may be necessary to admit of an efficient substitute being obtained.

My instructions, if judiciously carried into effect, will enable you to ensure the performance of duty by your subordinates, inasmuch as they authorise your getting rid of those who will not, or cannot, do their duty. In permitting incorrigibly careless or incompetent officials to retain their appointments, the Head of the Department incurs serious responsibility. It behoves him, therefore, to take prompt measures for preventing any one holding an appointment for which he has proved himself disqualified; otherwise he becomes indirectly the cause of such irregularities as may result from incorrigible carelessness or incompetency.

(signed) *G. Paton,*
Director General of the Post Office of India.

APPENDIX No. IX.

COMPARATIVE STATEMENT showing the Actual RECEIPTS, exclusive of Official Postages, in the Five Presidencies of *India* for 1860–61 and 1861–62.

HEAD OF RECEIPTS.	1860–61.			1861–62.			INCREASE.			DECREASE.		
Postage on Letters:	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal - - - - - -	1,98,810	11	6	2,09,902	7	11	11,091	12	5	—		
Pegu - - - - - -	9,441	5	6	8,521	–	–	-	-	-	920	5	6
Eastern Settlements - - -	35,571	3	8	43,780	3	6	8,208	15	10	—		
Madras - - - - - -	1,21,477	14	4	1,04,767	12	4	-	-	-	16,710	2	–
Bombay - - - - - -	1,80,833	6	4	1,65,409	0	7	-	-	-	15,424	5	9
North Western Provinces -	3,70,286	12	2	2,55,195	4	7	-	-	-	1,15,091	7	7
Punjab - - - - - -	-	-	-	1,34,330	11	–	1,34,330	11	–	—		
Total - - *Rs.*	9,16,421	5	6	9,21,906	7	11	1,53,631	7	3	1,48,146	4	10
Postage on Banghy Parcels:												
Bengal - - - - - -	61,583	4	5	61,105	10	11	-	-	-	477	9	6
Pegu - - - - - -	2,188	1	3	1,854	5	3	-	-	-	333	12	–
Eastern Settlements - - -	64	–	2	49	14	–	-	-	-	14	2	2
Madras - - - - - -	47,866	2	9	46,873	5	1	-	-	-	992	13	8
Bombay - - - - - -	59,082	6	–	63,894	1	6	4,811	11	6	—		
North Western Provinces -	1,36,660	6	–	1,00,726	12	5	-	-	-	35,933	9	7
Punjab - - - - - -	-	-	-	58,395	1	6	58,395	1	6	—		
Total - - *Rs.*	3,07,444	4	7	3,32,899	2	8	63,206	13	–	37,751	14	11
Express Postage:												
Madras - - - - - -	2,510	8	–	-	-	-	-	-	-	2,510	8	–
Total - - *Rs.*	2,510	8	–	-	-	-	-	-	-	2,510	8	–
Late Letter Fees:												
Bengal - - - - - -	–	10	–	-	-	-	-	-	-	–	10	–
Pegu - - - - - -	—			—			—			—		
Madras - - - - - -	1	12	–	-	-	-	-	-	-	1	12	–
Total - - *Rs.*	2	6	–	-	-	-	-	-	-	2	6	–
Registration Fees:												
Bengal - - - - - -	–	4	–	-	-	-	-	-	-	–	4	–
Pegu - - - - - -	—			—			—			—		
Eastern Settlements - - -	—			—			—			—		
Madras - - - - - -	—			—			—			—		
Bombay - - - - - -	—			—			—			—		
North Western Provinces -	—			—			—			—		
Punjab - - - - - -	—			—			—			—		
Total - - *Rs.*	–	4	–	-	-	-	-	-	-	–	4	–
Bullock Train:												
Bengal - - - - - -	2,49,818	3	10	2,56,047	8	7	6,229	4	9	—		
North Western Provinces -	9,07,158	5	10	4,65,924	10	7	-	-	-	4,41,233	11	3
Punjab - - - - - -	-	-	-	4,24,276	8	–	4,24,276	8	–	—		
Total - - *Rs.*	11,56,976	9	8	11,46,248	11	2	4,30,505	12	9	4,41,233	11	3

APPENDIX No. IX.—COMPARATIVE STATEMENT showing the Actual Receipts of the Post Offices, &c.—*continued.*

HEAD OF RECEIPTS.	1860-61.			1861-62.			INCREASE.			DECREASE.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Mail Cart:												
Bengal	-	-	-	14	2	–	14	2	–	—		
Madras	4,315	5	6	2,255	5	–	-	-	-	2,060	–	6
Bombay	1,303	8	9	-	-	-	-	-	-	1,303	8	9
North Western Provinces	62,032	12	3	15,599	3	6	-	-	-	46,433	8	9
Punjab	-	-	-	57,860	10	–	57,860	10	–	—		
Total - - *Rs.*	67,651	10	6	75,729	4	6	57,874	12	–	49,797	2	–
Passengers' Van Dawk:												
Bengal	10,130	4	–	9,207	10	6	-	-	-	922	9	6
Madras	—			—			—			—		
Bombay	-	-	-	5,097	13	6	5,097	13	6	—		
North Western Provinces	61,282	8	–	46,075	15	6	-	-	-	15,206	8	6
Punjab	-	-	-	19,032	8	–	19,032	8	–	—		
Total - - *Rs.*	71,412	12	–	79,413	15	6	24,130	5	6	16,129	2	–
Fines and Savings:												
Bengal	10,707	6	8	11,909	8	–	1,202	1	4	—		
Pegu	1,243	14	–	154	5	1	-	-	-	1,089	8	11
Eastern Settlements	5	15	–	-	-	-	-	-	-	5	15	–
Madras	7,533	9	1	7,613	14	4	80	5	3	—		
Bombay	12,706	13	8	7,994	15	–	-	-	-	4,711	14	8
North Western Provinces	31,047	15	1	14,285	11	6	-	-	-	16,762	2	7
Punjab	-	-	-	6,784	12	11	6,784	12	11	—		
Total - - *Rs.*	63,245	9	6	48,743	3	10	8,067	3	6	22,569	9	2
Miscellaneous:												
Bengal	9,705	9	10	3,041	12	8	-	-	-	6,663	13	2
Pegu	554	4	9	77	2	6	-	-	-	477	2	3
Eastern Settlements	–	4	–	2	12	–	2	8	–	—		
Madras	–	7	6	992	8	1	992	–	7	—		
Bombay	5,305	6	–	5,923	6	2	618	–	2	—		
North Western Provinces	2,529	–	2	2,162	9	8	-	-	-	366	6	6
Punjab	-	-	-	1,817	3	7	1,817	3	7	—		
Total - - *Rs.*	18,095	–	3	14,017	6	8	3,429	12	4	7,507	5	11
Sale of Postage Stamps:												
Bengal	4,02,404	6	11	4,34,783	1	4	32,378	10	5	—		
Pegu	27,489	5	6	28,602	15	6	1,113	10	–	—		
Eastern Settlements	63,038	2	8	75,145	5	8	12,107	3	–	—		
Madras	3,21,160	4	10	3,40,540	1	4	19,379	12	6	—		
Bombay	4,09,248	4	10	4,10,235	–	6	986	11	8	—		
North Western Provinces	3,76,006	12	7	3,13,927	–	10	-	-	-	62,079	11	9
Punjab	-	-	-	1,56,688	8	3	1,56,688	8	3	—		
Total - - *Rs.*	15,99,347	5	4	17,59,922	1	5	2,22,654	7	10	62,079	11	9
Total:												
Bengal	9,43,160	13	2	9,86,011	13	11	42,851	–	9	—		
Pegu	40,916	15	–	39,209	12	4	-	-	-	1,707	2	8
Eastern Settlements	98,679	9	6	1,18,978	3	2	20,298	9	8	—		
Madras	5,04,866	–	–	5,03,042	14	2	-	-	-	1,823	1	10
Bombay	6,68,479	13	7	6,58,554	5	3	-	-	-	9,925	8	4
North Western Provinces	19,47,004	8	1	12,13,897	5	7	-	-	-	7,33,107	2	6
Punjab	-	-	-	8,59,185	15	3	8,59,185	15	3	—		
Grand Total - - *Rs.*	42,03,107	11	4	43,78,880	5	8	9,22,335	9	8	7,46,562	15	4

(*Signed*) *G. Paton,*
Director General of the Post Office of India.

Camp Nynee Tal, October 1862.

COMPARATIVE STATEMENT showing the Actual DISBURSEMENTS of the POST OFFICES of the Five Presidencies of *India* for 1860–61 and 1861–62.

HEAD OF CHARGES.	1860–61.			1861–62.			INCREASE.			DECREASE.		
Salaries:	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bengal	1,17,276	5	6	1,16,472	7	7	- - - -			803	13	11
Pegu	8,726	7	1	17,261	8	2	8,535	1	1	—		
Eastern Settlements	3,600	–	–	4,530	–	–	930	–	–	—		
Madras	1,13,144	10	7	1,02,548	7	3	- - - -			10,596	3	4
Bombay	1,22,171	10	1	1,14,804	10	–	- - - -			7,367	–	1
North Western Provinces	5,43,709	2	6	1,33,571	1	4	- - - -			4,10,138	1	2
Punjab	- - - -			81,435	8	4	81,435	8	4	—		
Director General of the Post Office	36,000	–	–	33,634	15	–	- - - -			2,365	1	–
Compiler of Post Office Accounts	- - - -			7,639	9	–	7,639	9	–	—		
Total - - *Rs.*	9,44,628	3	9	6,11,898	2	8	98,540	2	5	4,31,270	3	6
Establishment:												
Bengal	1,08,466	6	2	1,43,866	11	2	35,400	5	–	—		
Pegu	37,408	12	1	20,512	10	3	- - - -			16,896	1	10
Eastern Settlements	7,026	11	3	6,684	1	11	- - - -			342	9	4
Madras	1,09,685	5	9	1,18,902	12	10	9,216	7	1	—		
Bombay	1,27,046	7	1	1,18,234	7	5	- - - -			8,811	15	8
North Western Provinces	- - - -			1,09,633	5	8	1,09,633	5	8	—		
Punjab	- - - -			63,757	8	4	63,757	8	4	—		
Director General of the Post Office	3,720	–	–	3,554	11	10	- - - -			165	4	2
Compiler of Post Office Accounts	- - - -			12,072	2	8	12,072	2	8	—		
Total - - *Rs.*	3,93,353	10	4	5,97,218	8	1	2,30,079	12	9	26,215	15	–
Road Establishment:												
Bengal	2,05,246	7	5	1,90,692	9	8	- - - -			14,553	13	9
Pegu	8,809	11	4	21,683	2	11	12,873	7	7	—		
Madras	1,83,262	14	5	2,00,671	3	2	17,408	4	9	—		
Bombay	4,27,588	–	5	2,36,162	15	11	- - - -			1,91,425	–	6
North Western Provinces	- - - -			1,38,116	14	–	1,38,116	14	–	—		
Punjab	- - - -			63,689	4	7	63,689	4	7	—		
Eastern Settlements	432	–	–	228	–	–	- - - -			204	–	–
Total - - *Rs.*	8,25,339	1	7	8,51,244	2	3	2,32,087	14	11	2,06,182	14	3
Contingent Charges:												
Bengal	90,052	13	10	60,751	5	5	- - - -			29,301	8	5
Pegu	6,323	14	1	3,335	1	–	- - - -			2,988	13	1
Eastern Settlements	3,747	7	7	1,331	15	9	- - - -			2,415	7	10
Madras	77,399	6	10	47,595	2	11	- - - -			29,804	3	11
Bombay	1,04,950	11	1	83,528	–	4	- - - -			21,422	10	9
North Western Provinces	55,008	14	9	22,065	11	9	- - - -			32,943	3	–
Punjab	- - - -			15,170	–	8	15,170	–	8	—		
Director General of the Post Office	2,790	13	–	964	3	10	- - - -			1,826	9	2
Compiler of Post Office Accounts	- - - -			734	12	2	734	12	2	—		
Total - - *Rs.*	3,40,274	1	2	2,35,476	5	10	15,904	12	10	1,20,702	8	2
Bullock Train:												
Bengal	3,34,583	9	9	3,06,059	13	3	- - - -			28,523	12	6
North Western Provinces	6,58,382	15	11	3,18,726	12	2	- - - -			3,39,656	3	9
Punjab	- - - -			1,70,433	8	11	1,70,433	8	11	—		
Total - - *Rs.*	9,92,966	9	8	7,95,220	2	4	1,70,433	8	11	3,68,180	–	3
Mail Cart:												
Bengal	1,55,236	–	11	1,62,486	8	9	7,250	7	10	—		
Madras	1,96,991	15	5	1,71,338	4	5	- - - -			25,653	11	–
Bombay	4,35,246	13	11	4,40,645	3	4	5,398	5	5	—		
North Western Provinces	6,09,121	–	4	4,15,868	3	11	- - - -			1,93,252	12	5
Punjab	- - - -			3,36,947	14	11	3,36,947	14	11	—		
Total - - *Rs.*	13,96,595	14	7	15,27,286	3	4	3,49,596	12	2	2,18,906	7	5

APPENDIX No. IX.—COMPARATIVE STATEMENT showing the Actual Disbursements of the Post Offices, &c.—*continued.*

HEAD OF CHARGES.	1860–61.			1861–62.			INCREASE.			DECREASE.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Bounty Money:												
Bengal - - - - -	447	10	–	943	14	–	496	4	–	—		
Pegu - - - - -	139	14	–	30	5	–	-	-	-	109	9	–
Eastern Settlements - - -	423	12	–	2,042	3	–	1,618	7	–	—		
Madras - - - - -	801	8	–	603	2	–	-	-	-	198	6	–
Bombay - - - - -	202	15	–	388	11	–	185	12	–	—		
Total - - *Rs.*	2,015	11	–	4,008	3	–	2,300	7	–	307	15	–
Banghy Charges:												
Bengal - - - - -	-	-	-	6,113	9	5	6,113	9	5	—		
Pegu - - - - -	-	-	-	110	–	–	110	–	–	—		
Eastern Settlements - - -	-	-	-	172	14	6	172	14	6	—		
Madras - - - - -	64,678	5	9	36,246	9	4	-	-	-	28,431	12	5
Bombay - - - - -	-	-	-	12,786	4	9	12,786	4	9	—		
North Western Provinces -	-	-	-	3,723	15	7	3,723	15	7	—		
Punjab - - - - -	-	-	-	2,375	9	1	2,375	9	1	—		
Total - - *Rs.*	64,678	5	9	61,528	14	8	25,282	5	4	28,431	12	5
Miscellaneous:												
Bengal - - - - -	1,632	12	4	-	-	-	-	-	-	1,632	12	4
Pegu - - - - -	100	9	3	-	-	-	-	-	-	100	9	3
Eastern Settlements - - -	196	7	6	49	3	6	-	-	-	147	4	–
Madras - - - - -	1,848	5	5	23,977	12	3	22,129	6	10	—		
North Western Provinces -	21,721	14	8	-	-	-	-	-	-	21,721	14	8
Punjab - - - - -	—			—			—			—		
Bombay - - - - -	172	–	–	-	-	-	-	-	-	172	–	–
Total - - *Rs.*	25,672	1	2	24,026	15	9	22,129	6	10	23,774	8	3
Construction and Repairs of Buildings:												
Bengal - - - - -	3,007	11	8	3,545	12	6	538	–	10	—		
Pegu - - - - -	-	-	-	8	–	–	8	–	–	—		
Madras - - - - -	3,103	1	6	1,441	15	4	-	-	-	1,661	2	2
Punjab - - - - -	-	-	-	529	1	6	529	1	6	—		
Bombay - - - - -	1,195	4	7	3,476	2	–	2,280	13	5	—		
North Western Provinces -	-	-	-	2,343	13	1	2,343	13	1	—		
Total - - *Rs.*	7,306	1	9	11,344	12	5	5,699	12	10	1,661	2	2
Charges incurred in Conveying Mails:												
Bengal - - - - -	-	-	-	19,166	10	8	19,166	10	8	—		
Madras - - - - -	-	-	-	11,700	–	–	11,700	–	–	—		
Total - - *Rs.*	-	-	-	30,866	10	8	30,866	10	8	—		
Pensions:												
Bengal - - - - -	9,532	4	–	11,580	14	3	2,048	10	3	—		
Madras - - - - -	6,432	–	8	2,724	5	–	-	-	-	3,707	11	8
Bombay - - - - -	8,570	15	–	3,983	10	3	-	-	-	4,587	4	9
North Western Provinces -	4,650	–	–	515	2	11	-	-	-	4,134	13	1
Punjab - - - - -	—			—			—			—		
Total - - *Rs.*	29,185	3	8	18,804	–	5	2,048	10	3	12,429	13	6
Total:												
Bengal - - - - -	10,25,482	1	7	10,21,680	4	8	27,866	15	2	31,668	12	1
Pegu - - - - -	61,509	3	10	62,940	11	4	1,532	–	9	100	9	3
Eastern Settlements - - -	15,426	6	4	15,038	6	8	172	14	6	560	14	2
Madras - - - - -	7,57,347	10	4	7,17,749	10	6	33,829	6	10	73,427	6	8
Bombay - - - - -	12,27,144	3	2	10,14,010	1	–	15,067	2	2	2,28,201	14	4
North Western Provinces -	18,92,594	–	2	11,44,565	–	5	6,067	12	8	7,54,096	12	5
Punjab - - - - -	-	-	-	7,34,338	8	4	7,34,338	8	4	—		
Director General of the Post Office	42,510	13	–	38,153	14	8	-	-	-	4,356	14	4
Compiler of Post Office Accounts	-	-	-	20,446	7	10	20,446	7	10	—		
GRAND TOTAL - - *Rs.*	50,22,015	–	5	47,68,923	1	5	8,39,321	4	3	10,92,413	3	3

(Signed) *G. Paton,*
Director General of the Post Office of India.

Camp Nynee Tal, October 1862.

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CHAPTER IV.

ELECTRIC TELEGRAPH DEPARTMENT.

ANNUAL REPORT on the Administration of the Electric Telegraph, for the Year 1861-62.

In accordance with the arrangement adopted in the last Report, the subject-matter of the present Report has been distributed under the following general heads:—

1. General History.
2. Lines.
3. Signal Offices.
4. Messages.
5. Instruments.
6. Stores and Workshops.
7. Establishments.
8. Finance.
9. General Management.

SECTION I.—GENERAL HISTORY.

1. In consequence of the dearness of provisions in Pegu, and in view to remove the disadvantage thence arising of service in that province, an addition to the pay of persons of this Department, not natives of Pegu, while serving there, was recommended to the Government, and received its sanction on the 28th May 1861.

2. The scale of the Pegu allowance is as follows:—

To persons drawing as monthly pay proper - - - -	500 rupees,	a Pegu allowance of	30 rupees.
Ditto - - ditto - -	400 „	- - ditto - -	30 „
Ditto - - ditto - -	350 „	- - ditto - -	30 „
Ditto - - ditto - -	300 „	- - ditto - -	25 „
Ditto - - ditto - -	250 „	- - ditto - -	25 „
Ditto - - ditto - -	200 „	- - ditto - -	25 „
Ditto - - ditto - -	150 „	- - ditto - -	20 „
Ditto - - ditto - -	120 „	- - ditto - -	20 „
Ditto - - ditto - -	100 „	- - ditto - -	18 „
Ditto - - ditto - -	80 „	- - ditto - -	18 „
Ditto - - ditto - -	75 „	- - ditto - -	16 „
Ditto - - ditto - -	60 „	- - ditto - -	15 „
Ditto - - ditto - -	50 „	- - ditto - -	14 „
Ditto - - ditto - -	45 „	- - ditto - -	13 „
Ditto - - ditto - -	40 „	- - ditto - -	12 „
Ditto - - ditto - -	35 „	- - ditto - -	11 „
Ditto - - ditto - -	30 „	- - ditto - -	10 „
Ditto - - ditto - -	25 „	- - ditto - -	8 „
Ditto - - ditto - -	20 „	- - ditto - -	7 „
Ditto - - ditto - -	15 „	- - ditto - -	6 „
Ditto - - ditto - -	10 „	- - ditto - -	5 „

3. On the effect of this allowance Mr. O'Donnell, the Superintendent of the Pegu Circle, writes as follows:—

"The grant of the Pegu allowance, small as it is, has had a most beneficial effect, as it has not only in some measure helped to enable those on low salaries to bear the extra expense of living in Pegu, but it has convinced them that there is every desire to consider their wants and, when possible, to reduce their difficulties."

4. On the 8th June certain suggestions were made by the Civil Finance Commission in view to the better and more economical working of the Department. The correspondence on this subject will be found in Appendix A.

5. On the 12th June the Government referred the question of the efficiency of the Telegraph Department for commercial purposes to the Chambers of Commerce at Calcutta, Bombay, and Madras, for opinion. The correspondence on this subject is given in Appendix B.

6. Difficulty having been experienced in obtaining medical aid for the establishments of the Department residing within military limits, the military surgeons, considering that civil establishments had no claim on their services, and civil surgeons considering themselves absolved from attending on persons in civil employ residing in military cantonments, a reference was made to the Government on the subject. An abstract of the correspondence

is

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is given in Appendix C., from which it will be seen that, in accordance with the Medical Code, if a civil officer resides from necessity in a military cantonment, he is entitled to gratuitous medical aid from the civil surgeon.

7. On the 31st July the sanction of Government was obtained to the free transmission by the Bombay Chamber of Commerce of a commercial message to Mr. Reuter's agent at Galle, for despatch by that gentleman to Europe on the departure of each mail. Other similar concessions shortly followed, viz. :—

For the transmission of a free commercial message twice a month by the Calcutta Chamber of Commerce to Mr. Reuter's agent at Bombay.

For the transmission of a free commercial message weekly between the Chambers at Calcutta and Madras ; and

For the transmission of a free commercial message weekly between the Chambers at Bombay and Kurrachee.

8. On the 15th August Sir William O'Shaughnessy, then absent in England on sick leave, addressed the Government on the subject of the frauds which had been perpetrated on the line near Bombay, and which were alluded to in paragraph 9 of last Report. A copy of Sir William's Memorandum, and of my reply, is given in Appendix D.

9. On the 5th November instructions were issued by the Supreme Government to the Local Governments, directing that the police should report to the nearest telegraph office every accident to the lines that might be observed by them. The correspondence on this subject is given in Appendix E.

10. On the 10th December a scheme for the revision of the establishments of the Department received the sanction of Government. Details of this scheme will be found under the head "Establishments."

11. On the 28th December the Government were pleased to appoint me to the office of Director General of Telegraphs in India, which had become vacant by the resignation of Sir William O'Shaughnessy, who had since the 13th of June 1860 been absent on sick leave.

12. On the 21st January 1862, Major P. Stewart was appointed Director of Telegraphs in the Eastern Division. He was immediately on appointment placed at the disposal of the Foreign Department for employment on the proposed line of telegraph through Persia.

13. On the 8th March priority of transmission was accorded by Government to messages of European public news received by the Overland Mail for the Press over all other private mail messages, on the understanding that the whole of each such message should be published immediately on its receipt, and that no use should be made of such messages before publication.*

14. On the 25th April, Section XI. of the Rules of the Department, dated the 21st December 1859, was revised, and the date of delivery of a message to the Department for despatch, which had previously, if given by the sender, been charged for, was added by the Department free of charge. On the same date an alteration in Section XXI. of the above rules was made, and the limit within which complaints or applications for refund would be attended to was extended from two months to three months in the case of messages limited to India and Ceylon, and to six months in the case of messages passing beyond those limits. Refund, which by Rule XXI. was limited to repetition messages, was at the same time extended to all messages, whether paid for at repetition price or not. A portion of the correspondence on this subject is given as Appendix G.

15. Rules XI. and XXI, as they stood previous to and after alteration, are given in Circular 1 of the 8th May 1862, Appendix V.

16. On the 1st November, the Malta and Alexandria Submarine Telegraph, forming part of the line intended to connect India with Europe, was opened to the public.

SECTION II.—LINES.

17. The construction of the following lines was sanctioned during the year :—

Rangoon to Moulmein - - - - - - -	166 miles.
Agra to Ajmere - - - - - - - -	245 ,,
Coconada to Tallarean - - - - - - -	13 ,,
Chinoor to Sironcha - - - - - - -	20 ,,
Indore to Neemuch - - - - - - -	150 ,,
Total length - - -	594 miles.

Proposals

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* Subsequent to the termination of the year, the limitation of precedence to messages received direct from the post was removed, and precedence was extended to all press messages of European news, irrespective of the channel through which they might reach the offices of the Department.

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Proposals for the construction of the following lines are under consideration :—

Jubbulpore to Saugor	109 miles.
Cochin to Tuticorin	205 „
Cannanore to Dharwar	273 „
Dacca to Gowhatty	265 „
Total length	852 miles.

18. The following line is under construction :—

Meerut to Mussoorie, distance 125 miles: of this 64 miles are completed, viz., from Meerut to Roorkee.

19. The construction of the following lines was proposed :—

A line from Indore to Khundwar, distance 74 miles. The object of the proposal was to connect the Government system of telegraphs with that of the Bombay—Jubbulpore Railway, and thereby obtain a more direct communication with Jubbulpore than at present, as well as an alternative line between Indore and Bombay; but as Indore was already in communication with Jubbulpore through Agra, as well as through Hyderabad, and as a second line was not required for the business between Indore and Bombay, the proposal was not acceded to.

20. A proposal was submitted by Lieutenant Glasford, Deputy Commissioner, Godavery Districts, for the transfer of the existing line between Mohadapore and Chanda to the route originally intended for it along the left bank of the Godavery, a route which was abandoned in 1858, owing to the disturbances then prevailing in that district; and it was considered by the proposer that as the brick pillars and wooden posts which had then been erected along 39 miles of the route were still standing, much of the expense that would otherwise have been necessary would consequently be saved; but the experience of the Department had proved the unfitness of brick pillars as supports for line wires, and there was no ground for expecting that after four years of exposure the wooden posts would have proved serviceable.

21. One object of the proposition would appear to have been the presumed greater security of the telegraph lines in territory under British rule; but it does not appear that our lines are more liable to injury from casual mischief or to destruction, during political outbreak, where passing through territories under native rule than in those under our own rule.

22. The change would have involved the stoppage of all communications through the Central India lines during the entire of the period necessary for the transfer, probably about two months; on these grounds, as also on the large expense the transfer would have occasioned, the proposal was negatived by the Government.

23. No new lines having been completed during the year, the mileage remains 11,030 as in last Report, of which 10,731 miles have a single wire, 225 miles a double wire, 29 miles a treble wire, and 45 miles a quadruple wire, giving an aggregate of 11,448 miles of line-wire.

Punjab Circle.

24. Inconvenience was felt from the circumstance that the spans across the Rivers Jumna and Ganges, in the immediate neighbourhood of the Agra and Futtehghur Offices of the Bengal Circle, did not belong to that circle but to the Punjab;—delays in consequence resulted in repairing breakages. This inconvenience was remedied by the removal of the boundary between the two circles from the outer walls of the offices mentioned to the opposite banks of their respective rivers.

25. During March and April several interruptions were occasioned by the wilful cutting of the line between Agra and Delhi, at a point where it runs at a considerable distance from the main road, the object of the cutting being to obtain possession of the zinc ingot joints by which the several lengths of wire are connected, and which on this section are very numerous. The culprit was apprehended and sentenced to two years' imprisonment. This portion of the line will be removed to the main road on the first favourable opportunity.

26. *Loodianah to Phillour.*—The cable across the Sutlej at Phillour having, in July, been broken by the strength of the current, was replaced by a second cable, which has also failed. Communication at present is kept up by an air-line supported on the masts of boats.

27. *Lahore to Mooltan.*—Communication has been frequently interrupted on this section, owing to the unusual height of the river, which runs for many miles parallel to the line and road. The line is very unsafe, and must be reconstructed next working season, when the opportunity will be taken to remove it to the railway embankment.

28. The span on the line from Agra to Allyghur, which crosses the Jumna at Agra, close to the pontoon bridge, and which, as mentioned in paragraph 24, was transferred from the Punjab to the Bengal Circle, was found to require considerable repair, which would have entailed an expense greater than was required for removing the line to the crossing of the Futtehghur wire, a mile lower down the river at the Taj Mehal. The span was removed accordingly, and the two lines now form a double span of No. 8 wire, 1,980 feet from bank to bank without intermediate support.

BENGAL CIRCLE.

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29. The span across the Ganges at Futtehghur, then three miles in breadth during the rains, and which had also been transferred from the Punjab to the Bengal Circle, as mentioned in paragraph 24, is supported on six masts fixed in millstones, which were planted in the bed of the river during the dry season. To these masts are attached stays of No. 1 iron wire, fixed to blocks of stone. The arrangement is, however, very unsatisfactory, the line being constantly injured by boats; and it will be necessary either to lay a cable here, or to build masonry piers for the support of the masts.

30. *Futtehghur to Cawnpore, and Cawnpore to Allahabad.*—These sections have been repaired, but will have to be reconstructed during the next working season. For this Hamilton's standards have been provided.

31. *Allahabad to Benares.*—Owing to defective insulation, the second wire on this section, which was added during the year, could not be brought into use. The two cables crossing the Ganges at Allahabad, and forming a portion of this line, are in good order. The line is supported on Hamilton's half standards, and will be furnished with Sir William O'Shaughnessy's pattern of insulator.

32. *Benares to Dehree.*—This section has given much trouble from constantly recurring imperfect communication, the cause for which cannot at present be assigned, but is probably some defect in the earth plates. The line has been thoroughly repaired, and has no apparent defect. The offices have changed hands more than once, and both these and the lines have been examined both by the superintendent in charge of the circle and his assistant; unaccountable interruptions varied by imperfect communications occur in fine as well as in wet weather, and during all periods of the 24 hours. The line is on Hamilton's half standards.

33. *Dehree to Burhee, and Burhee to Raneegunge.*—The posts on these sections were erected in 1854, and are now only kept standing by high mounds of earth round each. They will have to be removed next working season by Hamilton's standards, which have been provided for the purpose.

34. *Benares to Patna.*—This section must be reconstructed next season. The cable crossing the Soane failed in October. Bank offices were kept open for one month, when on the falling of the river the cable was repaired, and has since continued to work well.

35. *Patna to Monghyr.*—This section is in a very bad state; its reconstruction will be necessary next working season, for which Hamilton's standards have been provided.

36. *Monghyr to Bhaugulpore, Bhaugulpore to Rajmehal, and Rajmehal to Burdwan.*—Hamilton's standards are in course of erection throughout this section. Materials were distributed in September and October; but owing to the refusal of the East Indian Railway Company to admit the right of this Department to construct its lines within the Railway Company's fences, four months of the working season were lost, and very large additional expenses incurred. The correspondence on this point is given in Appendix H.

37. *Raneegunge to Midnapore.*—This line was hastily constructed in 1860 with bamboos and saul saplings, and several miles were blown down in April 1861. Its permanent construction with Hamilton's posts was commenced in January, and the work is still in progress.

38. *Hooghly River Lines.*—These lines have worked very successfully; an interruption being of rare occurrence. A new cable was laid across the Hooghly at Kookrahatty by Dr. Swaine (the inspector in charge of this division), at the small cost for the operation of 30 rupees. A portion of the old cable, which was recovered and joined to a piece of new cable, was also successfully laid by Dr. Swaine across Channel Creek to replace the cable which had failed there.

PEGU CIRCLE.

39. The following sections of line in this circle have been reconstructed with first-class iron wood standards:—

Prome to Thyetmyoo - - - - - - - -	45 miles.
Part of the line Henzadah to Rangoon - - - - -	25 ,,
Rangoon to Pegu - - - - - - - - -	52 ,,
Myoung Kedouk to Kyouktaga (part of the line connecting Prome with Padeng) - - - - - - -	76 ,,
TOTAL - - -	198 miles.

40. During the year the needle instruments in use in this circle have been replaced by Morse instruments with very great benefit to the working of the lines.

41. The opening of the line to Calcutta has had a most beneficial effect on the collections of the circle, as will be hereafter shown.

42. Accidents to cables from lightning have been very numerous, not one having escaped.

Indore Circle.

43. No construction or important repairs have taken place in this circle, and nothing of interest has occurred in the working of the lines.

East Coast Circle.

44. *Bezwara to Dowlaishwaram.*—Sixty-five miles of this section is on Hamilton's standards, the remaining 28 miles have been lately repaired, but must be reconstructed with Hamilton's standards next working season.

45. *Dowlaishwaram to Vizagapatam.*—The crossing at the Godavery, four miles wide, composed jointly of air lines and cables, has given much trouble, owing to imperfect construction, but is being thoroughly secured.

46. *Chicacole to Berhampore.*—Hamilton's standards have been erected throughout this section (96 miles); but the line cannot be completed until the receipt of the wooden tops necessary with these standards, and which were not received with them from England.

47. *Khoordah to Cuttack.*—The air lines crossing the "Rishckooke," "Cooki," and "Kudjuree" rivers, the two former 1,200 feet broad, are being strengthened.

48. *Cuttack to Ballasore.*—This section has given great trouble, owing to the decayed state of the posts. It is under permanent reconstruction with Hamilton's half standards.

49. *Dowlaishwaram to Coconada.*—This section of 32 miles is in a bad state, and must be reconstructed next working season.

50. *Jellasore to Kedgeree.*—This line is under reconstruction with Hamilton's half standards.

51. The cash collections in this circle, as will be elsewhere seen, have increased 10 per cent. over those of last year; the increase being chiefly from the short branch lines communicating with the trading ports of Calingapatam, Bimlipatam, and Coconada.

Madras Circle.

52. Between Madras and Pondicherry the line where at any great distance from the main road has been brought nearer to it in view to afford less facility for the perpetration of frauds similar to those referred to in paragraph 9 of the last Annual Report as having occurred near Bombay.

53. As was the case last year, several of the masonry pillars on the line to Bombay *viâ* Nellore, Bangalore, and Bellary, and between Bangalore and Mysore, have fallen, and have been replaced by timber supports; these will again be replaced by Hamilton's standards as soon as they can be conveyed from Madras, where a sufficient number are in store to render permanent all the lines in the circle.

54. *Cochin to Calicut.*—Communication on this section has been improved by the removal of decayed posts, and by replacing three cables by a like number of air lines.

55. A slight alteration in the direction of the line is proposed by taking it further inland, where the creeks are narrower, and can be spanned by air lines, an arrangement which will admit of two of the remaining cables being dispensed with.

Dacca Circle.

56. In July the southern boundary of this circle was removed from Akyab to Padeng, making the total length of lines in the circle 680 miles. No reconstruction or extensive repairs have taken place during the year.

57. *Ramoo to Akyab.*—This section has always given much trouble, owing to the numerous river crossings which occur on it. The defects in the Naaf cable led to the commencement of an air line, by which the necessity of a cable crossing would have been avoided, but which was subsequently abandoned, it having been found possible to repair the cable which is now working.

58. The cable across the "Pudda" failed in August. In December, when the river had fallen, it was found that an island had been thrown up near the left bank of the river. On this a line was constructed, supported on bamboo tripods and connected with the left bank by an air line suspended in the centre of the river on the mast of a boat anchored in the stream, and with the right bank by a cable. The storms in March blew down the whole of the line on the island, and broke the flying air line, sinking the boat on which it was supported.

59. The crossing was a second time reconstructed, being supported on ordinary masts on the island portion, the line across the river being supported on masts erected on bamboo rafts anchored in the stream. The communication, which was thus again restored, has not since been interrupted.

60. Cable crossings at the following places in this circle failed during the year, viz.: at

the

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the "Ellenkhally," "Pudda," "Dhullasary," "Kurmapooley," "Naaf," and "Myoo" rivers, and at Akyab Harbour. The cables at the last three places were of English manufacture, and were rendered useless by the corrosion of their iron armour, which was much too slight; those at the other crossings were probably injured by lightning, or by the force of the current.

61. Of the above seven crossings, five were recabled, namely, those at the "Ellenkhally," "Dhullasary," "Kurmapooley," and "Myoo" rivers, and that crossing Akyab Harbour. The cable at the Naaf was also repaired, but no cable was available for restoring the Pudda crossing.

The "Dhullasary" and the "Myoo" river cables are again defective, though not altogether unserviceable.

Scinde Circle.

62. *Kurrachee to Kotree.*—In consequence of the great distance of the line from the railway, it has been considered necessary, for the reasons mentioned in paragraph 113 of last report, to remove it to the railway embankment. Of this about 30 miles have been completed.

Bombay Circle.

63. There has been no construction in this circle during the year, the whole of the lines being permanent, with exception to 128 miles from Cullian to Bulsar, which it is proposed ere rendering permanent to remove to the embankment of the Baroda Railway, as soon as its site is marked out. The wooden supports, as they become unserviceable, are being replaced by Hamilton's standards.

64. Reports from the Central India and South-East Coast Circles not having been received from the superintendents concerned, the details of their working are not available.

65. It should have been mentioned in last report that the usual distance between the supports on the lines of this department has been one-sixteenth of a mile, or 110 yards; but it is very desirable to reduce this number to the utmost possible limit, as the wire is at each support brought into communication more or less imperfectly with the earth.

66. Towards the close of 1860 experiments were, by my direction, made on the line, Allahabad to Benares, on the distances possible, with supports of the description then generally used, viz., Hamilton's half standards. Spans of 14, 12, and 10 per mile were tried, and it was found that the latter spacing was practicable with No. 1 wire, at a deflexion at centre, stated to be about four feet.

General Working of Lines.

67. The following table, prepared from statements received from the superintendents of circles, exhibits the comparative frequency of interruptions throughout the year in the various circles per 100 miles of length, and the comparative duration of such interruptions as have occurred in each.

68. It will be seen on a reference to the last Report, that the frequency and duration of the interruptions has in this year greatly exceeded those of last year. This is chiefly attributable to the unusually wet season, for it will be remembered that the main roads of communication in many parts of India were under water, and in Western India the floods were so extensive as to stop the traffic on the railway. The wooden supports were also, it must be remembered, one year older.

Return showing the Number of Interruptions and their Average and Aggregate Duration in each Circle for the Year 1861–62.

—	Bengal.	Punjab.	Bombay.	East Coast.	Central India.	Madras.	Indore.	Scinde.	Dacca.	Pegu.	South-East Coast.
Number of miles comprised in each circle.	1,749	1,563	1,224	1,153	1,275	1,122	735	784	619	538	242
Total number of interruptions in all parts of the circle during the year.	261	260	151½	220	156½	54½	32½	38	67½	64	6
N.B.—Imperfect communication is considered as = ½ an interruption.											
Aggregate duration of the above interruptions (duration given in hours).	8,534½	7,227	2,717½	6,578½	4,442	1,377½	554	1,259	6,070	4,030½	99*
Proportion of the number of interruptions to the mileage of the circle (100 miles being taken as the unit of mileage).	14·92	16·63	12·37	19·08	12·27	4·85	4·42	4·84	10·90	11·89	2·47
Average duration of each interruption in hours.	33	28	18	30	28	25	17	33	90	63	16

* Interruption reports from the South-East Coast Circle were not available except for three months, and the result of this period only is given here.

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69. I regret to find, too late, however, to make corrections, that the statement of interruptions received from the superintendent of the Central India Circle is unreliable.

70. From the returns prepared by him, and abstracted in the above table, it would appear that, so far as freedom from interruption is concerned, his circle is on a par with the Bombay Circle, and stood higher than the Punjab and Bengal Circles, and in a position 50 per cent. more advantageous than the East Coast Circle.

71. In reality, no one of the circles mentioned but has been much freer of interruption than that of Central India; and the East Coast Circle, which would appear to stand in a position 50 per cent. worse than it, has, with the single exception of the branch lines from Kedgeree to Balasore, the interruptions on which did not interfere with the working of the main line, been remarkably free from interruption.

SECTION III.—SIGNAL OFFICES.

72. A new office has been opened at Sironcha, and offices have been closed at the two places following, viz., Monghyr and Chinnoor.

73. In Appendix I. is given a general list of offices either open or liable to be opened for correspondence as they stood at the close of the year.

74. The list, with other items of information, exhibits the monthly cash collections of each office on the average of the last quarter of the year, and classifies the offices as "self-supporting" and "unprofitable."

75. This classification is based on the assumption that the increase in collections, consequent on the establishment of an office, arises jointly from the messages sent to it and from it, the value of the two being assumed equal, and that of the latter being shown in its cash collections; and, consequently, that, if the monthly cash collections of an office amount to *half* its monthly expenses of all natures, the office is "self-supporting." It is further assumed that the monthly expenses of an office in full work and employed in day and night transmission, if terminal, that is, with one line only entering it, and one instrument only used in it, is 280 rupees. If intermediate, that is, with two lines entering it and two instruments used in it, 480 rupees; and if intermediate, but at a junction with other lines, then 120 rupees per line or instrument in excess of two. Classified on this principle, and comparatively with last year, the offices stand thus:—

—		1860-61.		1861-62.	
		Rupees.	Offices.	Rupees.	Offices.
Self-supporting - - - - - - -		- -	59*	- -	39
Unprofitable -	Monthly collections under -	- -	- -	360	–
	" " -	- -	- .	300	2
	" " -	- -	- -	250	7
	" " -	- -	- -	200	5
	" " -	150	5	150	19
	" " -	100	28	100	25
	" " -	50	16	50	12
	" " -	25	27	25	35
TOTAL - - -		- -	145	- -	144

76. Included with the above are the seven Hooghly river offices, which are all departmentally unprofitable, the collections for five of them being under 10 rupees each, and for the other two under 25 rupees.

77. A considerable number of unprofitable offices are at present required to insure telegraph communication during the rains in cases where the interval between offices would otherwise be then too considerable for direct work. Insulators of the Brooke pattern were received towards the close of the year, too late, however, to admit of any opinion being formed of the extent to which they were likely to remove the great drawbacks to which our lines are subject from the absence of insulation.

78. The general list shows that 65 of the offices are Government property, and that 77 are leased, the rents of these last being shown.

79. During the year sanction was obtained for the construction of offices at the following places, viz., Kyouk Phyoo and Padeng, and for nine cable junction houses at the river crossings

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* Had the calculation for 1860-61 been based on the more accurate data employed in the present Report, the offices that were self-supporting in 1860-61 would have been 39 only.

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crossings in Arracan, at a total cost of 16,923 rupees. An office was purchased at Akyab for 4,500 rupees.

80. The office at Monghyr was closed during the year, and an office opened at Bhaugulpore.

81. Proposals for opening offices at Dinapore and Cuddalore were made, but were not sanctioned. As respects the first of these proposals, it was considered unnecessary to establish a telegraph office so near to Patna, where one already existed; and as respects the second, sanction was refused on the ground that the cost of establishing the office had not been provided for in the Budget Estimate. A proposal for opening an office at Tellicherry is under consideration.

82. The practice of keeping the signal offices open for the receipt and transmission of messages throughout the 24 hours, is a source of considerable and unnecessary expense in establishments, and is opposed to the practice in Europe generally, where the extent of "service," so far as it may be independent of departmental considerations, is regulated by the importance of the place. The offices in Europe are classed into those open for both day and night service, those open for full day service only, and those open for limited day service; the first being open throughout the 24 hours, the second between 8 and 21 hours only, and the last between 8 and 12 and 14 and 20 hours. A similar classification might be most usefully adopted on the Indian lines.

83. *Closure of Offices on Sundays and Holidays.*—The sanction granted by Government to the closure of all signal offices between 8 and 16 hours on all Sundays and on the four principal holidays, which was mentioned in paragraph 68 of last Report, was not at first acted on to the full extent; as it was considered advisable, in the first instance, not to interfere with the transmission of messages actually in offices or in progress along the lines, but to permit all such to pass as usual. The result of the arrangement was in many cases this, that the transmission of these messages kept the signallers employed during a considerable portion of the time during which, under the above sanction, they were entitled to relief from work. On the 28th December, therefore, the sanction of Government was acted on in full, and the transmission of messages was suspended during the hours mentioned, with exception to those of public news or mail messages, or those on urgent public service, for the transmission of which, without risk of delay, the rules laid down in Circular No. 92* were promulgated.

84. The effect of the closure on Sundays, &c., which had scarcely come into full operation at the termination of last year, may be inferred from the following comparative statement, showing the number of messages received for transmission into the Calcutta Office during eight Sundays and 48 weekdays of the months of February and March—first in 1860, before the change; next in 1861, when the change was in partial operation; and last in 1862, when the change was in full operation:—

1860, Before the Change.			1861, When in Partial Operation.			1862, When in Full Operation.		
	Service.	Private.		Service.	Private.		Service.	Private
Number of messages sent on the eight Sundays of the above period.	32	315	Number of messages sent on the eight Sundays of the above period.	22	221	Number of messages sent on the eight Sundays of the above period.	4	137
Number of messages sent on the 48 week-days of the above period.	701	3,610	Number of messages sent on the 48 week-days of the above period.	702	4,540	Number of messages sent on the 48 week-days of the above period.	701	3,933
TOTAL - - -	733	3,925	TOTAL - - -	724	4,761	TOTAL - - -	705	4,070
Percentage of Sunday to week-day messages.	4·57	8·73	- - - -	3·13	4·87	- - - -	0·57	3·48

85. The difficulties in the service of the offices of the Hooghly River lines, owing to their unhealthiness during certain seasons of the year, led to the recommendation of a special allowance to Dr. Swaine, the inspector in executive charge of those lines, as a remuneration for his professional attendance to the establishments of those offices. This allowance, at 50 rupees per mensem, was sanctioned on the 23d October, and the result has been most satisfactory, the sickness among the signallers at these stations having been much reduced, and the necessity of constant reliefs, with their concomitant expense, having been avoided.

SECTION IV.—MESSAGES.

86. The total number of messages sent through the lines of the department throughout the year was, exclusive of those on departmental service, 244,042, of which 35,970, or 14·33 per cent., were on the Government service. The numbers sent from each circle are shown in the Table given as Appendix J. The diagram, Appendix K., exhibits approximately the fluctuations in the numbers of each class of messages during the year.

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* *Vide* Appendix N. of the Administration Report of the Telegraph Department for 1860–61.

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87. The cash receipts on private messages for the year were *Rs.* 5,48,582. 12. 1, being *Rs.* 42,860. 13. 11, or 8·47 per cent., in excess of those for the previous year. Those on service messages were *Rs.* 1,25,841. 7. 5, being *Rs.* 6,359. 14. 0, or 5·32 per cent., in excess of those for the previous year. The receipts of each circle in each month of the year for service and private messages, and the increases and decreases as compared with the previous year, are given in Appendices L. and M.

88. The opening of the submarine line, Malta to Alexandria, mentioned in paragraph 16, has as yet had no perceptible influence on the receipts of this department.

89. The percentage of messages, both service and private, sent on Sundays and week-days, has been given in paragraph 84.

90. The number of messages sent on week-days during each hour of the 24 is approximately as follows:—

Time - - -	Hours -	0 to 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to 12.
Number of Messages - -	Service	–	–	–	–	1	2	5	8	11	18	27	33
	Private	9	19	–	4	6	17	81	126	129	190	148	163

Time - - -	Hours -	12 to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	21 to 22.	22 to 23.	23 to 24.
Number of Messages - -	Service	34	43	45	35	44	28	25	9	7	11	2	–
	Private	215	251	201	209	198	189	130	91	49	54	34	7

91. No arrangement having been previously in force for insuring the confidential service messages which pass along the lines from being unnecessarily seen, whether in signal offices or in the General Complaint Office (to which latter, as mentioned in paragraph 126 of last report, all copies of messages are forwarded), I directed that all such should be posted in separate covers, and addressed not to the Complaint Office, as in the case of ordinary message drafts, but to my own office, where special arrangements exist for securing their secrecy as well as simple means of registry, by which the omission of any office to forward a confidential service message can be at once detected, provided a copy of it has been received from any other office. The order on this subject is given in Circular 31, Appendix V.

92. It should have been mentioned in last report, that in February 1861 the Calcutta Chamber of Commerce called my attention to the fact, which had also been animadverted on by the local press, that copies of old messages were being used in the bazaar for wrapping up groceries. Appendix N. gives the correspondence on this subject, points out the probable means by which these messages found their way into the bazaar, and shows the remedy adopted to prevent a recurrence of such cases. All the old messages that could be found in the bazaar were recovered by the police, and I am glad to say that the measures taken for insuring their greater security have been most successful; for, from the time when this occurrence took place up to the present date, the department has been entirely free from reproaches of the nature brought to notice by the Chamber of Commerce.

93. *Charges on Messages.*—The only change in the manner of charging on messages during the year occurred in April, when the alteration in Section XI. of the revised rules, which has already been alluded to in paragraph 14, was made, whereby the "office date," that is to say, the day, hour, and minute of receipt of a message into a telegraph office, is now, in every instance, added by the department, and telegraphed free of charge.

94. *Errors in Messages.*—With reference to the numerous mistakes that were constantly made in telegraphing the names of persons and places, Sir William O'Shaughnessy, in July 1859, directed that every name, both in the address and body of a message, should be repeated back by the receiving signaller before the message was passed on to the next office, or sent out to the addressee, or issued as public news.

95. The order appearing to have fallen into disuse, it was reissued in December, and the opportunity was taken to include, with the names of persons and places, the repetition of which alone had hitherto been required, all words over whose correct transmission the context afforded no check—such, for instance, as vernacular words or unusual commercial or technical terms. This order is given in Circular No. 130, Appendix V.

96. The rule of refusing refunds in the case of messages on which repetition price had not been paid has been changed, and refunds are now granted in all cases of error to the extent to which the message has by such error been rendered useless to the receiver; but no refund is granted in the case of figures, unless the precaution of giving the number in two forms, that is to say, the number and its double, has been taken.

97. *Punishment for Faults in the Transmission of Messages.*—The modes of punishing for

faults in the transmission of messages in force at the commencement of the year was by fining the assistant or signaller or signallers to blame, in the following proportions:—

1st.—In the case of loss of a message, the full value was recovered from the assistant in charge.

2d.—In the case of gross error, or such as should have been obvious on perusal by the assistant in charge, then one-half was recovered from the assistant in charge, and the remaining half from the two signallers between whom the error occurred.

3d.—In the case of the error being of such a nature as not to be obvious on perusal by the assistant in charge, then the total value of the message was recovered in equal shares from the signallers concerned.

98. The amount of punishment was consequently measured not by the amount of the fault committed, but by the value of the message in which the fault had occurred. This defect was remedied by fixing certain amounts as the fines to be inflicted for each class of error, irrespective of the value of the message. Circular No. 126, in Appendix V., gives the details on this subject.

99. *Effect of Weather on Error.*—The effect which the absence of insulation and the want of a sufficient number of wires has on the amount of error has been mentioned in paragraphs 82 and 83 of last report.

100. The influence of the weather on the amount of error is shown in the diagram (Appendix O), which exhibits the relation between the percentage of complaints and fall of rain in Calcutta for each month of the year.

101. The comparison would have been more properly made with the fall of rain along the course of the principal lines, corrected for the relative telegraph traffic along each, but the necessary information was not obtainable.

102. *Delay in Transmission of Messages.*—The causes of delay in transmission have been detailed in paragraphs 86 to 99 of last report.

103. In illustration of the delays occasioned by bad weather, I may mention that whereas 12 words per minute, or 720 words per hour, can be sent in the ordinary course of working during fine dry weather, it frequently happens that but one-fourth of that number, or 180 words per hour, can be sent when communication is rendered imperfect by wet weather.

104. *Delay in Delivery of Messages.*—The causes of this have been mentioned in paragraphs 127 to 130 of last report.

105. To reduce the number of undelivered messages, it was on the 24th September ordered by Circular 121 (Appendix V.), that in addition to the English list posted outside of offices, a vernacular list of such messages should also be posted.

106. The number of messages received into the Calcutta Office during the year, which could not be delivered, was 194. The total number of messages received into that office for delivery was 30,223; hence the percentage of undelivered messages to number received is 0·64.

107. The causes of non-delivery are—incorrect address; error introduced into the address during signalling; absence of indication of residence; the addressee having left the station; or the message being, for some reason, refused by the person whose address it bears. It was not found possible to exhibit the proportion of non-delivery chargeable to each of these several causes.

108. The inconvenience arising from insufficient addresses would appear to have been of late in France so considerable as to have occasioned a communication from the Director General of the Government lines of that country to the Presidents of the several Chambers of Commerce, of which the following is a translation:—

(Translation.)

"Sir, "Paris, 20 January 1862.

"A TENDENCY which becomes daily more marked has led the public to give incomplete addresses to their telegraph despatches.

"Many senders, trusting to the notoriety which they attribute to their correspondents, omit all indication of their residence, occasioning thereby serious injury to their own interests as well as embarrassment to the telegraph department.

"However well known a person may be, it will rarely be sufficient to insure delivery that his name only is given in the address. Should the name become altered in transmission, or be borne by other persons in the same locality, information respecting residence is then indispensable. From neglect of this natural precaution a large number of despatches only reach their destination after a long delay, and when they have become useless. Inquiries also often prove fruitless, and it may happen that the despatch intended for one merchant is delivered to a competitor bearing the same name.

"These inconveniences have, on various occasions, attracted my notice; but they specially claim my attention now that a reduction in the tariff is causing a considerable increase in the number of despatches, and when it is especially necessary for orderly working to remove all causes of uncertainty and embarrassment. It is also, I consider, of importance that the public should know that the administration cannot insure the delivery of despatches unless the residence of the addressee is given by number and street, and that it will have no right to complain if, in the absence of this information, its despatches do not reach their destination."

109. The original of the preceding letter is given as Appendix P.

110. *Inquiry into Complaints of Error, Delay, or other Faults in the Transmission of Messages.*—The following Table shows the nature and number of the complaints received during the year:—

Nature of Complaints.	Nature of Messages.		
	Service.	Private.	Total.
Error - - - - - - - -	49	106	155
Tardy delivery - - - - - - -	61	177	238
Misdelivery - - - - - - -	2	6	8
Non-delivery - - - - - - -	78	216	294
Error and tardy delivery - - - -	4	3	7
Total - - -	194	508	702

111. Besides the above, 26 complaints of a trivial nature respecting error in charges, and not connected with the transmission of messages, were also received.

112. The disposal of the above 702 complaints was as follows:—

Nature of Disposal.		Nature of Messages.		
		Service.	Private.	Total.
Complaints considered justifiable.	Refunds granted - - - - - - - -	24	226	250
	Entitled to refund, but refund not given, not having been asked for - - - - - - - -	108	55	163
	Not entitled to refund, as when delay complained of was caused by interruption; the message, nevertheless, reaching in less time than would have been occupied by the post - - - - - - - -	36	131	167
Complaints considered groundless.	As of non-delivery when the Department holds the addressee's receipt - - - - - -	24	63	87
Complaints not inquired into.	Not having been received within the prescribed limit of two months - - - - - - - -	2	33	35
	Total - - -	- -	- -	702

	Rs.	a.	p.
Total amount refunded - - - - - - -	1,544	4	–
Amount recovered by fine on the assistants and signallers to blame - - - - - - - -	1,209	13	9
Loss by refunds - - - - - - - -	334	6	3

113. A reference to last Report will show that the fines in that year were in excess of the refunds to the extent of 15·53 per cent.

114. The change in the system of fines referred to in paragraph 98 has led this year to he refunds exceeding the fines by 27·62 per cent.

115. No amount of loss could of course justify an unfair system of punishment; but it is well here to mention that, so far as the finance of the department is concerned, the amount of fines might be still further reduced without actual loss to the Government, as the recoveries on account of faults and objectionable departmental messages have aggregated *Rs.* 428. 13. during the year. (See paragraphs 122 and 126.)

116. The percentage of complaints of all natures and of refunds to the total number of messages and total amount of cash collections for this year and the year preceding are as follows:—

	1860–61.	1861–62.
Percentage of complaints to messages sent during the year -	0·234	0·287
Percentage of refunds to cash collections of the year - -	0·275	0·229

117. During the year the limit of two months, within which applications for refund on account of error, delay, &c. must be made, has been extended to three months.

118. In

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118. In paragraph 103 of last Report, the departmental inconveniences resulting from the civil mode of reckoning time were mentioned, as well as the change in time reckoning which had been introduced to avoid them. But a further change, viz., the introduction of an arbitrary time, as the telegraph time for all India, was for many purposes felt to be necessary, and for this the time of the town of Madras was made choice of.

119. The reasons for this choice were, that as Madras is, as respects longitude, about equi-distant between Calcutta and Bombay, the adoption of its time involves the minimum of difference between telegraph and local times generally, and that as it has a government observatory, true time from it can more readily be obtained than from any other station in India.

120. Madras has the additional advantage of being a seat of government and the head quarters of a departmental division, and circle.

121. Circular No. 115 (Appendix V.) exhibits one example of the application of a general telegraph time, and gives a table of the differences between this time and local time for all the telegraph stations in India.

122. *Fault Branch.*—This branch was, as stated last year, established for purposes of departmental discipline alone, and the important part it plays in enforcing this may be inferred from the following statement of its work during the year:—

Number of messages traced which appeared from the maximum and minimum time interval reports at Calcutta, Madras and Bombay, to have been an excessive time on the line - - -	531
Number of delays in the above which were noticed by fine, warning or reprimand of persons in the offices where the delays occurred -	718
Number of errors in the above which were noticed - - -	33
Number of miscellaneous faults which were noticed - - -	27
Number of neglects or breaches of departmental circulars which were noticed - - - - - - - - - - -	63
TOTAL - - -	1,372

	Rs.	*a.*	*p.*
Amount of fines inflicted on assistants and signallers on account of the above - - - - - - -	157	12	–
Of which was remitted on satisfactory explanation being afforded, and in consideration of the general good management of the persons fined - - - - - -	20	7	–
Balance in favour of Government - - - - *Rs.*	137	5	–

123. *Service Message Examination.*—The object with which this branch was established is explained in paragraph 115 of last Report. The results of its operation during the year, and also in contrast with those for such months of the preceding year as the office was in operation, are as follows:—

MONTHS.	Number of Service Messages 1860–61.			Number of Service Messages 1861–62.		
	Sent.	Reported Objectionable.	Per-centage of Objectionable.	Sent.	Reported Objectionable.	Per-centage of Objectionable.
May - - - -	- - Not in operation.			4,071	45	1·105
June - - - -				2,960	25	0·844
July - - - -				2,789	25	0·896
August - - -				2,906	31	1·066
September - - -				2,899	21	0·724
October - - -				2,925	17	0·581
November - - -				3,130	25	0·799
December - - -	3,277	60	1·831	2,885	31	1·074
January - - -	3,223	69	2·141	2,926	42	1·435
February - - -	3,039	57	1·875	2,789	36	1·291
March - - -	2,922	80	2·735	3,002	50	1·665
April - - - -	3,220	67	2·080	2,688	35	1·302
TOTAL - - -	15,681	333	2·124	35,970	383	1·065

124. The various grounds on which the above messages were considered objectionable are:—

1st. For being wordy.

2d. For not being of such urgency as to call for the use of the telegraph,—as when the message is not of an urgent nature and the postal time inconsiderable.

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3d. For not being strictly on the public service,—as applications for leave, and replies to such.

4th. For "precedence" of transmission having been improperly claimed.

5th. For a "clear line" having been improperly or needlessly claimed.

125. The total of service messages considered objectionable under each of these heads for the year was as follows :—

1st. Wordy - - - - - - - - -	10
2d. Not urgent - - - - - - - - -	79
3d. Not strictly on the public service - - - - -	291
4th. Precedence improperly claimed - - - - -	—
5th. A "clear line" improperly or needlessly claimed - -	3
Total - - -	383

126. *Departmental Message Examination.*—The circumstances under which it was considered necessary to introduce this check on the messages sent by officers of the department on its business are mentioned in paragraphs 117 and 118 of last report. Materials for preparing a return of the number of such messages examined are not conveniently available for this Report, but the following statement will give some idea of the operations during the year of this branch of my office :—

CIRCLE.	Number of Bills.	Value of Bills.	Value of Objectionable Messages Retrenched.
		Rs. a. p.	Rs. a. p.
Bengal - - - - - - - -	212	2,194 1 9	39 – –
Madras - - - - - - - -	121	1,599 8 –	8 – –
Bombay - - - - - - -	156	1,175 15 –	15 8 –
East Coast - - - - - - -	154	903 6 6	8 10 –
Central India - - - - - -	88	649 8 4	27 12 –
Indore - - - - - - - -	42	382 14 –	11 1 –
Punjab - - - - - - - -	102	1,883 3 –	116 10 –
Dacca - - - - - - - -	48	476 15 –	6 12 –
Pegu* - - - - - - - -	—	—	—
South East Coast† - - - - - -	—	—	—
Scinde - - - - - - - -	114	834 7 –	58 3 –
Total - - -	1,037	10,099 14 7	291 8 –

127. This check has not, however, been entirely successful, and I regret to report that the underhand practice of sending departmental messages under the name of "practice" messages without payment has been found to exist in the Bombay and Dacca Circles, and apparently with the knowledge of the superintendents of those Circles.

128. *Cash Checker's Branch.*—The objects with which this branch was established are mentioned in paragraph 125 of last Report. The establishment consists of seven clerks, at an aggregate monthly cost of 145 rupees.

129. In addition to ensuring that the actual amount collected at offices for the transmission of messages is duly and punctually paid into the various treasuries, the following sums have been recovered :—

OFFICE.	Amount Deficient.	For what Month.	When and how Recovered.	Explanations given by Assistant in charge.
	Rs. a. p.			
Rewah - - -	8 9 –	March 1861 -	By Treasury receipt, 1st August 1861.	Error through clerical inadvertence.
Delhie - - -	75 3 –	April „ -	Ditto, 5th Nov. 1861 -	Forgetfulness (explanation very unsatisfactory. Assistant since dismissed on other grounds).
Kedgeree - - -	6 – –	Sept. „ -	By postage stamps, 6th February 1862.	Oversight in charging less than the proper rate.
Ditto - - -	5 10 –	Dec. „ -	By Treasury receipt, 7th April 1862.	Omitted to charge double on Sunday.
Jubbulpore - -	23 4 –	Ditto - -	Ditto, 12 March 1862 -	Error occurred through entrusting a signaller with the cash account during temporary indisposition of the assistant.

130. The

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* Telegraph service messages are permitted to be sent free in this Circle, on the ground that the business is so inconsiderable that the public are not likely to be inconvenienced by the occupation of the lines with departmental work.

† No bills received.

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130. The number of letters of inquiry which it was found necessary to send from this branch during the year was 2,375, or at the rate of 17·21 per signal office open to the public, the number of which latter is 138.

131. It having been discovered that in certain telegraph offices the signallers had been in the habit of receiving fees for writing out in English the messages of native senders, the objectionable practice was prohibited by Circular 137, given in Appendix V.

132. During the year an exception was made to clause XX. of the rules of the department, which directs that "the name of the sender must be written on the face of every message," the exception being in favour of messages received from passing ships. Such messages are often sent ashore for transmission without signature, by passengers and others, in ignorance of departmental rules. Instructions regarding the special treatment to which such messages are in the interests of the addressee to be subjected, are given in circular 144, Appendix V.

133. The practice of abbreviating words while signalling, which was very common in signal offices, and was a fertile source of mistakes in messages, has also been prohibited: the order on this subject is given in Circular 145, Appendix V.

134. It is, however, most desirable that an authorised Code of abbreviations should be introduced into the department: the subject shall receive early attention.

SECTION V.—INSTRUMENTS.

135. The number of instruments necessary for the full service of the department was shown in paragraph 143 of last Report, to be 446.

136. It was also shown in paragraph 131 of the same report that of the two descriptions of instruments in use, viz., the original needle and the Morse instrument, the latter was alone suitable for use on the Indian lines.

137. It was further shown that the modification of the Morse instrument, devised by Sir W. O'Shaughnessy, had not given satisfaction, owing mainly to the inferior workmanship of the departmental workshop at Bangalore.

138. Sir W. O'Shaughnessy, to whom, during his absence in England, I had intimated our wants in instruments, sent out during the year a description of Morse instrument of recent invention, in the recording part of which every objection that had hitherto been felt to the existing plan of tape record was removed.

139. To explain the nature of the improvement, I must premise that the record of the original Morse instrument was obtained by embossing on the paper tape certain combinations of the two elementary Morse symbols, the dot and the bar, by which the letters of the alphabet are represented.

140. The printing executed after this method was most prejudicial to the sight, as the trifling differences in level, caused by the presence of the blunt rounded style on the paper tape were always most difficult to read, and demanded a special light.

141. The method had also this objection, that the force required to form the impressions was such that the feeble current received from the distant station could not be employed for the purpose, but a fresh current obtained from a strong local battery within the office, which was brought into action by the weak distant current, had to be made use of, and an additional piece of apparatus, termed the relay, required for bringing this local battery into action, became indispensable.

142. Added to this there was the objection noted in paragraphs 151 and 152 of last Report, that without great care in the adjustments the important function of automatic transmission might become seriously compromised.

143. Many attempts to remove the chief difficulty, viz., that experienced in reading the embossed symbols, had from time to time been made through the employment of capillary ink tubes and other means of coloured writing, but without practical success.

144. A Hungarian, named John, resolved the difficulty in October 1856, in a remarkably simple manner. He replaced the embossing point, which is carried on the end of the writing lever, by a thin metal wheel, whose lower edge, during the interval between the markings, dipped into a reservoir of ink, and whose upper edge was, when writing, brought into contact with the under side of the paper tape, and revolving with it, left an easily legible coloured trace.

145. There were these disadvantages, however, in the arrangement, that the writing lever was loaded with an undesirable addition to its weight, whereby its motions were rendered somewhat slower and less easy to excite; and that the writing was on the underside of the paper tape, and imperfections of action could not immediately be detected.

146. In August 1857 Messrs. Digney Brothers, of Paris, improved on this idea, and in their construction the writing wheel was fixed to the framing of the instrument instead of forming part of the writing lever. Below, and nearly in contact with the writing wheel, was

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was the turned-up claw of the writing lever, and between these, but just clear of contact with either, ran the paper tape on which the message was to be recorded.

147. Now this arrangement is theoretically and practically perfect, and so far as a legible record is concerned, leaves nothing to be desired, and as the force required for slightly deflecting from a straight line, a thin ribbon of paper under no appreciable tension is theoretically almost infinitely small, so in practice it is found that the presence or absence of the tape has no appreciable influence on the force of current required to work the instrument.

148. Thus by this simple change every objection to the existing Morse instrument was at once removed. No difficulty of reading remained, however unfavourable the light; the power required was trifling, and the necessity of a relay, at least on all short circuits, consequently ceased; and as no difficulty existed in the adjustments, so no waste of time was involved in making them, nor compromise to automatic working risked, even when the adjustments were not very skilfully made.

149. These instruments were in 1861, after a two years' trial, introduced into the offices of the French Government Telegraph, and they were selected by Sir W. O'Shaughnessy as the kind best fitted for the purposes of this department.

150. During the last quarter of the year 1861, 120 of these instruments were received, of which by far the larger number arrived more or less damaged in transit. Fortunately the damages were rarely of a serious nature, being chiefly limited to the breakage or distortion of the paper tape reel and its support; and these were promptly remedied in the departmental workshop.

151. It deserves notice that such of the instruments as appeared to have been repacked in London were, as a rule, all received in a damaged state, whereas those that appeared to have been forwarded from London in the original French package arrived uninjured.

152. These instruments were distributed to the various offices as fast as their repairs could be effected—attention being principally directed to the completion with instruments of the main lines of communication, viz., those from Calcutta through Agra to Bombay, from Bombay to Madras, and from Calcutta through Patna and Benares to Bellary. The Siemens' instruments, thereby displaced, were brought to Calcutta, and after repair, distributed to the Punjab, Dacca, and Pegu circles.

153. The number of Morse instruments, of serviceable construction, in use and in store at the beginning and ending of the year, was as follows:—

	1st May 1861.	30th April 1862.
Of Siemens' and Halske's construction - - - - -	190	190
Of the Bangalore modification of the above - - - - -	8	8
Of my construction - - - - - - - - - -	- - -	4
Of Digney's construction - - - - - - - - -	- - -	80
TOTAL - - -	198	282

154. The very small addition made during the year to the above number by instruments of my pattern, arose from the heavy demands on the workshop for the repair of the instruments of Digney's pattern, which, as stated in paragraph 150, had been received from England in an injured state, as well as from the repairs to the Siemens' and Halske's instruments, which a four years' constant use had rendered so requisite, and which the receipt of Digney's instruments had permitted to be withdrawn for that purpose. The opportunity of these repairs was taken for effecting the reduction in size and form, and making the alterations in the connexions referred to in paragraph 134 of the last Report, and paragraphs 155 and 156 below.

155. *Siemens' and Halske's Morse Instrument.*—The construction of these instruments is, in every point of view, admirable, their strength being such that they run little risk of injury during transport, or from careless treatment in offices; but their bulk and weight are serious drawbacks, as all repairs of any consequence are necessarily made in Calcutta, and the cost of carriage for this purpose is, in many cases, a heavy item. The change in arrangement, which I introduced into these instruments, and which permits the portion most likely to require repair, viz., that by which the messages are recorded, being removed without detriment to the efficiency of the instrument for working by sound, and which was mentioned in paragraph 134 of last Report, will reduce the inconveniences in question, should the tape record be at any time hereafter had recourse to. Subsequently, by an alteration in the disposition of the various parts, the area covered by this instrument was reduced from 27¾ inches by 16½ inches to 18 inches by 15 inches, a reduction which has materially remedied the inconveniences felt from the weight and bulk of the original

instrument, and below which it does not appear possible to reduce it, provided the power of record is retained.

156. The instrument had the further disadvantage of working with a different battery current, depending on whether station or translation (*i.e.*, automatic) work was in hand. This defect is being remedied as opportunity offers. The nature of the change and the inconveniences it removes are explained in Circular No. 143, Appendix V.

157. The instrument has, however, this great advantage, that its various component parts can be removed and exchanged when out of order, thus in many cases rendering it unnecessary to send any other than the injured portion to Calcutta for repair.

158. *Digney's Morse Instrument.*—With the power of giving an irreproachable ink record of its work without any of the drawbacks that this power had previously entailed, and with the advantages over Siemens' instrument of less weight and bulk, this instrument has several disadvantages. Its workmanship is too delicate for the rough work of our offices. Its several component parts cannot be removed from the instrument board for repair or exchange, and in consequence, when the clock-work of the recording portion requires cleaning or repair, that portion cannot be removed, so as to leave the instrument the power, as in Siemens', of working as a sounder. Certain of the working portions are also unprotected from dust, and repair will consequently be much more frequently necessary to these than to the like parts in Siemens' instrument, which are protected by a glass case.

159. The construction of the manipulating key of these instruments is not satisfactory, affording neither freedom of action nor durability; and it has been found necessary to exchange those attached to the instruments in the Calcutta office after only 10 months' service.

160. The manipulating keys by which the above are replaced are of my own design, and there is no doubt, from the experience already had, that they will prove both more satisfactory in action, and more durable than any other kind which has hitherto been tried.

161. The relay of Digney's pattern of instrument is much inferior both in the permanence and facility of its adjustments to the same portions in the later specimens of Siemens' pattern of instrument, and is constantly requiring readjustment.

162. There is also a great tendency in Digney's relays to become magnetized, from which Siemens' relays of the polarized construction are free, and it is doubtless from changes in the amount of this effect, which increases probably during continuous signalling, and gradually decreases during any cessation of work, that the frequent adjustments mentioned in last paragraph become necessary. Another defect of this relay is the manner in which the current is conducted from the wire of the one coil to that of the other coil; this is not by soldering together the ends of the wires, but by trusting to the contact between the brass bobbins of the coils and the iron cores on which they fit, a contact of too imperfect a character to be relied on.

163. *My construction of Morse Instrument.*—This instrument possesses every advantage whether of the Siemens' or Digney's pattern of instrument, without the defects which I have imputed to these. The tape record, which, under the present system of working, is superfluous, is dispensed with, a change which has permitted of a considerable reduction of cost and size. It is more portable than either of the instruments mentioned, measuring 18 inches in length by 12 inches in breadth, dimensions which in future specimens will be still further reduced by the removal of the key to the operating table, as in the case of Digney's instrument; and by discarding the galvanoscope, which I have superseded by a small needle placed over the relay coils, whereby the resistance to current of these coils, so prejudicial in uninsulated lines, is entirely got rid of. No change has been found necessary in any part of the instrument, whether in its proportions or in the strength of its various parts since it was first designed in 1860.

164. In this instrument the relays are of Siemens' polarized construction, with a trifling modification in form and size, suggested by myself, and the arrangement of currents adopted is that referred to in paragraph 156. The manipulating key is of the kind mentioned in paragraph 160, and I have no hesitation in asserting that this combination of instrument is the best that, so far as our existing experience goes, can be used in India, and that it is not surpassed by any combination at present elsewhere in use.

165. A great improvent in instruments of this class would, I think, result from the substitution of permanent for temporary magnents, as has been done in many forms of the relay. Experiments are in hand on this point.

166. As respects the cost of these instruments, the sounding portion, which is alone made in our workshops, costs, with the instrument board and the various connections, manipulating key, &c., 35 rupees. The relay being of Messrs. Siemens' and Halske's construction, and which is obtained from that firm, costs 5 *l.* 15 *s.* 6 *d.*, or delivered per Peninsular and Oriental Company, at Calcutta, 90 rupees, making the total cost of the instrument 125 rupees, which can be reduced to 105 rupees if the relays are

brought out by screw steamer round the Cape, as in the case of the Digney instruments. In contrast with this, the cost of Siemens' instrument is 36 *l.* 10 *s.* 4½ *d.*, or *Rs.* 365. 3., and that of Digney's instrument about 185 rupees, in each case delivered in Calcutta; but an additional expenditure in repair of about 10 rupees each was incurred on these last ere they could be issued to offices (*see* paragraph 150 on this point).

167. I was desirous, if possible, to have these instruments made in England, but the inquiries made of one firm there have shown that the cost would be 19 *l.* each, which, with freight and charges added, would have brought up the cost to 220 rupees, landed in Calcutta.

168. The cost of my pattern would, of course, have been much larger had the power of recording its work been retained.

169. *Time Balls.*—On the 3d April, the machinery for hoisting the time ball in Calcutta ceased to work. On examination, it was found that the wooden case in which the piston, which guides and moderates the fall of the ball, works, was decayed, and it became necessary to renew the whole of the woodwork connected with it. Opportunity was, at the same time, taken to refit the discharge apparatus.

170. The repairs, which were commenced on the 3d April, had not been completed at the close of the year under review.

171. During the 337 days, between the 1st May 1861 and the 3d April 1862, when the ball ceased to be dropped, but one failure occurred, viz., on the 23d November, when it fell 10 seconds before the proper time; it is presumed, from some carelessness at the Time Ball Tower.

172. At Madras, the dropping of the time ball was exhibited on 277 days during the year, and failed on 18 occasions.

173. At Bombay, the time ball has been dropped daily, Sundays and holidays excepted, without a single failure.

SECTION VI.—STORES AND WORKSHOPS.

Stores.

174. The approximate quantity and value of stores sent from England during the year is given in Appendix Q.

175. The proportion of those expended during the year and remaining in store at its termination cannot at present be ascertained, in consequence of the absence of Returns from the Southern Division.

176. The chief feature of the year under this head has been the large number of Hamilton's iron standards, and of the Brooke pattern of insulator, which have been received from England.

177. The standards have been extensively brought into use; but it had not been found possible, up to the close of the year, to make any use of the insulators, the caps and brackets necessary for fixing them to the standards not having been received.

Workshops.

178. At the commencement of the year there were departmental workshops, both at Calcutta and Bangalore; but the expenditure at the latter, about 1,000 rupees a month, being considered excessive, and the out-turn of work insignificant in quantity, and inferior in quality, it was abolished on the 31st October, since which date the Calcutta workshop has sufficed for meeting the demands of the entire department.

179. No better position than Calcutta could have been chosen for the departmental workshop. At the seat of Government and head quarters of the department it possesses a more perfect and regular system of communication with Europe through the agency of the Peninsular and Oriental Company, of the French Company, and of the Cape line of steamers, and of the numerous first-class sailing ships, than any other port in India. Through the local steam companies it has also the command of the coasts of Arracan as far as Rangoon, and of the East Coast of India as far as Madras, besides being able to distribute stores throughout the northern portion of India, through the agency of the various railways and large rivers, at a very moderate cost; a power which the completion of the various systems of railway will extend to all parts of India.

180. It has further, both in respect of skilled labours and workshop materials, the command of the best supplied market in the world out of Europe or America.

181. The inconveniences under which the workshop has laboured, and which were de-

tailed in paragraph 170 of last Report, will shortly be removed by the transfer of the Iron Bridge premises to this department.

182. The work turned out during the year has been—

Made.

Morse Intruments on my pattern	4
Tops of Hamilton's Posts	1,970

Repaired.

Siemens' Morse Instruments	48
Digney's ditto	56
Bangalore pattern	8
Galvanoscopes	115

Besides a large amount of miscellaneous work, which it would serve no useful purpose to detail.

183. In paragraph 171 of last Report, I mentioned the disadvantages we were under from the want of workshop accommodation for the purposes of experiments which are much required on the strength and conductivity of the iron wire we so largely use, and on the conductivity of the copper wire which plays so important a part in our signalling instruments. An example of the inconveniences that may be caused by the use of inferior copper wire has been given in paragraph 156 of last Report, and the importance of attention to the quality of the copper wire made use of will be understood from the fact that the conductivity of the commercial copper wire supplied for the manufacture of the Atlantic cable, which was stated by the different manufacturers to be remarkably pure, and to which no mechanical objection could be urged, was found by Professor W. Thomson* to vary with the limits of 100 and 54·9, the conductivity of some other specimens of copper of mechanically good quality having been found to range so low as 34·1.

184. The good conductivity of the iron wire so largely employed in the construction of our lines is of even greater importance than that of the copper wire used in the instruments. No comparative experiments appear to have been anywhere made on this important subject, nor, considering the greater relative impurity of iron over copper, is there ground for expecting that such large differences in conductivity as have been found to exist in mechanically good copper wire will be found in iron wire; but there can be no doubt that attention to this point will well repay the department in the saving of first cost, and of after charges for conveyance, by the selection of wire which affords the required conductivity with the least of weight of metal.

185. In this view I included a set of apparatus proper for inquiries on this subject in my indent on the Home Government dated the 3d April 1862.

186. The strength of the line wire the department uses is in no respect less important than its electrical conductivity. The number of supports per mile, that is say, the number of points in each mile at which the wire is brought into connexion more or less imperfect with the earth, and, therefore, the amount of current loss, and corresponding waste of battery materials and difficulty of signalling, as also the relative freedom from interruption by breakage, are all largely dependent on this quality.

187. The heavy expense and disappointment attending the employment of subaqueous cables for river crossings, which in the larger rivers have, as a rule, to be replaced annually, render it also most desirable to replace these, as far as may be possible, by air-spans; but the strains in such cases are often so extreme as to preclude the use of any but the most tenacious materials, and as the height of the masts employed must be arranged in anticipation for material of a certain assumed tenacity, and as, in order to reduce the cost of these expensive constructions, the highest known standard of tenacity must be assumed, it is clear of how great importance it is to have the means of testing the material which it is proposed to employ, as well as of checking the quality of the supply sent out.

188. Apparatus for applying the tenacity test will be prepared as soon as the workshop is transferred to the new premises at Alipore.

189. It is desirable that in all future indents for wire the required conductivity should be mentioned, and not the gauge, as has hitherto been the custom, and that a minor limit to the tenacity should also be laid down.

190. For the former of these I am scarce prepared to offer any recommendation, as no experiments have, so far as I can learn, been published on this very important subject. But, from calculation, I would presume that wire of fair commercial quality, such as is

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* See "London and Edinburgh Philosophical Magazine" for June 1858, page 473.

generally used on the Government lines in India, viz., No. 1, having a diameter of three-tenths of an inch, may be considered of good quality, electrically, if the resistance per mile which it opposes to the passage of a current does not exceed 5⅔ of Siemens' mercury units. I have made choice of Siemens' units for the expression of the resistance (the inverse of conductivity) because that unit was adopted by the Home Government for the expression of the resistances in the Submarine Cable Inquiry of 1861.

191. On the receipt of the apparatus for which I have indented, I shall be in a position to fix on a fair standard of conductivity to be insisted on in all supplies of line wire that may thereafter be sent out.

192. The limit of tenacity I would be disposed to lay down is such that the wire used for line purposes should not break under a less strain than that due to 24,000 feet of its own length, a limit which does not exceed what may reasonably be expected from English iron of fair commercial quality drawn, or rather rolled to No. 1 size, and that in the Nos. 8 and 12 steel wire used in air-spans the breaking weight should not be less than that due to 55,000 and 60,000 feet of their own lengths respectively. These numbers are equivalent to 35·7, 81·8, and 99·3 tons per square inch, strengths in no way extraordinary for wires rolled as in the case of No. 1 iron wire, or drawn down, as in the case of the steel wire, to the sizes mentioned.

193. The conditions of conductivity and tenacity above laid down would suffice, were each coil of line wire uniform in strength throughout its entire length, but this unfortunately is not the case. Wire of No. 1 size is received in coils weighing 2½ cwt., and measuring one-fourth of a mile in length, each composed of four separate pieces welded end to end. The process of welding materially reduces the diameter and strength of the wire at the junction, and it is at these weakened points that the fractures caused by the contraction of the wire during cold weather always occur.

194. It is, therefore, most desirable that all welds should be avoided, and that the wire should be delivered in the greatest lengths it is possible to manufacture without welds and without material enhancement in the cost. The coils of No. 1 wire, as usually sent out, are, as stated, one-fifth of a mile in lengths, and weigh 2½ cwt. each, but there does not appear to me any reason why a mass of iron of this weight should not be rolled into a continuous length of one quarter of a mile.

195. It would suffice, however, were the coils of wire to be one-fifth of a mile in length, instead of one-fourth, for there would then be only five joints per mile, instead of 16, as at present. The weight of this reduced length, viz., 2 cwt., or 5½ maunds, would be more suitable for camel-carriage than that of the present coils, which weigh only seven seers short of seven maunds.

196. I feel, therefore, disposed for the present to recommend that in future indents for No. 1 wire it should be required to be delivered in coils one-fifth of a mile in length, free of weld or other joint; that its ultimate tenacity should be such as not to break under a less strain than that due to 24,000 feet of its own length; and that its resistance to current per mile should not exceed 5⅔ of Siemens' units. The experiments which will be made will probably, however, show that some alteration in the last number is necessary.

197. *Ingot Joints.*—Hitherto zinc has been used for these, the quantity necessary for each being 1 lb. 2 oz., or at the rate of 18 lbs. per mile of line wire.

198. As mentioned in paragraph 25, such massive joints offer great temptation to theft. I have lately experimented on alloys, which, while not materially exceeding zinc in cost, will so much exceed it in strength as to permit of the joint being made with a quantity of metal too small to offer any inducement for cutting the wire for the sake of the metal composing the joints. The absence of suitable workshop accommodation has much interfered with these and other experiments.

SECTION VII.—ESTABLISHMENTS.

199. The strength of the establishment at the beginning and end of the year was, exclusive of office servants and others drawing less than 10 rupees per mensem, as follows:—

GRADE.	Strength on the 30th April 1861.	Strength on the 30th April 1862.
Director General	1	1
Directors of Divisions	3	3
Superintendents	10	15
Assistant Superintendents	6	10
First Inspectors	80	20
Second ditto		24
Third ditto		19
Fourth ditto		18
Assistants in charge of offices and signallers	548	534
Ditto ditto ditto (Native)		92
Probationers	128	72
Ditto (Native)		10
Line Artificers	118	44
Mounted Artificers, Patrols, Mistrees, Muccadums, Jemadars, Lascars, and other line establishments	99	157
Compiler of Telegraph Accounts (late Assistant Auditor)	1	1
Head Clerks and Accountants	12	13
Clerks, Assistant Accountants, Record-keepers, Cash-keepers, Writers, Sircars, &c.	153	143
Storekeepers	8	2
Superintendent of Printing Office, Compositors, Pressmen, Lithographers	18	16
Workshop Artificers	8	—
TOTAL	1,193	1,194

200. The grounds of the various changes involved in the scheme of reorganization are detailed in the copy of my letter to Government, No. 1263, of the 20th August 1861, given as Appendix R.

201. Its principal features are, in brief, as follows:—

1st.—A general increase was made to the pay of the higher ranks of the department.

2nd.—The proportions of the various grades of signallers and the pay assigned to each were for the first time laid down.

3rd.—The same was done in respect of the various office-servants; but from the want of fuller details on local peculiarities, and the exceptions they necessitate, this was done provisionally merely, and will require revision.

4th.—A large number of idlers, under the designation of horse patrols, line guards, &c., were struck off the departmental list; and in their stead it was arranged that a native mounted artificer should be stationed at every office, under the orders of the assistant in charge, whose duty it would be to ride out on the occurrence of an interruption, and take steps to remedy it. This addition to the establishment is yet far from complete; time is required to obtain select men.

5th.—An increase from 10 to 15 was made in the number of superintendents. A new grade, viz., that of Assistant Superintendent, was created for the special purpose of permitting that a chief officer of the circle, whether the superintendent or his assistant, should at all times be occupied in the very important duty of inspecting and controlling the working of the lines and offices—the proportion of the year that each should be so employed being four months in the case of the superintendents, and eight months in that of the assistant superintendents—an arrangement which insures a continuous circle inspection, without entailing, as had hitherto been the case, heavy arrears of office-work on the superintendent who might have attempted to acquaint himself with the condition of his circle. The necessity of such constant inspection is indisputable, and how much it may advantage the credit of the department and promote the interest of the public may be judged from the marked improvement which has taken place in the working of the East Coast Circle since Mr. Bailey took charge, and which is attributable to the extensive inspections which that officer made of his lines, as mentioned in paragraph 187 of last Report.

202. The above changes were introduced during a year of great financial difficulty, when therefore, had increases to the gross expenditure on establishments been considered desirable, they could not have been proposed. My object was, therefore, to make the best use in my power of the pecuniary means at my disposal; and although a general increase was made in the salaries of the higher grades, and the number of persons in these grades was also increased, as well as numerous increases to the pay of signallers, this was effected with an immediate incidental saving of *Rs.* 3,756. 5. 6. per month—a saving which, as the various grades are brought up to the intended strength, will become reduced to *Rs.* 2,906. 5. 6. monthly.

203. *Signallers.*—A marked improvement has taken place in the conduct of this class

since last Report; and the newly-created grade of Assistant Superintendent will prove a powerful auxiliary in weeding out the remaining bad characters. Dismissals, and resignations to avoid dismissal, are already much less frequent than formerly.

204. The Register of Characters mentioned in paragraph 176 of last Report doubtless exercises a powerful influence over the conduct of the signallers. The promotions on the reorganization have in many instances led to inquiries from those passed over; and the replies, giving the reasons for withholding promotion, must have made it extensively known to the signallers how large an influence character, as recorded on their character sheets, would for the future have on their prospects in the department.

205. Much discontent, tending doubtless to reckless conduct, has been removed by controlling the power previously exercised by superintendents and others of inflicting on signallers fines that were, frequently, disproportionately heavy, both as regards the nature of the offence and the salary drawn by the person fined. Rules limiting the amount of fine, and restricting the power of fining to certain grades in the department, are given in Circular 119, Appendix V.

206. The allowance to persons of the department serving in the Province of Pegu, referred to in paragraph 180 of last Report, was, as mentioned in paragraph 2 of the present Report (under the head "History"), sanctioned in June 1861; the result has been satisfactory.

207. *Training of Signallers.*—The number of signallers trained in the department during the year, and the number so trained who remained in the department at the end of the year, is as follows:—

	Remaining under training at the end of 1860-61.	Admitted for training during the year.	Total.	Deduct: Sent out to Offices.	Deduct: Absconded.	Deduct: Dismissed.	Deduct: Died.	Deduct: Total.	Remaining under training at end of year.
Barrackpore School -	18	58	76	37	3	10	–	50	26
Meerut ,, -	46	–	46	33	4	8	1	46	–
Madras ,, -	20	42	62	60	1	1	–	62	–
Bombay ,, -	4	–	4	3	–	1	–	4	–
In Offices - - -	5	30	35	–	–	–	–	35	–

208. *Casualties.*—The number of deaths, resignations, dismissals, and desertions in each grade during the year is as follows:—

GRADES.	Casualties, 1861-62. Resignation.	Desertion.	Death.	Services dispensed with.	Dismissal.	Total.
Director General - -	1	–	–	–	–	1
Directors - - -	–	–	–	–	–	–
Superintendents - -	–	–	–	–	–	–
Assistant Superintendents -	–	–	2	–	–	2
Inspectors - - -	2	1	4	–	1	8
Morse Assistants - -	1	–	–	–	–	1
Assistants in Charge - -	2	–	–	–	1	3
Signallers - - -	32	2	6	1	35	76
Probationers - - -	–	–	1	–	28	29
European Artificers - -	4	–	1	1	25	31
Native Artificers - -	–	–	–	–	2	2
Mounted Patrols - -	–	–	1	–	4	5
Jemadars - - -	–	–	–	–	2	2
Accountants - - -	5	–	–	–	3	8
Assistant Accountants -	–	–	–	–	1	1
Clerks - - - -	8	–	2	4	16	30
Total - - -	55	3	17	6	118	199

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Readmissions.

209. The number of readmissions during the year was as follows:—

Inspectors	-	1
Signallers	-	6
Total	-	7

Services of Officers.

210. It has been usual, in the Annual Reports of this department, to mention the names of such officers in it as had rendered marked good services. Such mention will here be confined to officers in the grade of superintendents, or who were officiating in that grade, and this in the order of their departmental seniority.

211. Messrs. Bailey, O'Donnell, Galbraith, Wickham, Teale, M. K. Man, H. J. Walton, and Lieutenant Mallock, who were favourably mentioned in last Report, continue to justify the good opinion there given of them.

212. Mr. H. Man, in charge of the Scinde Circle, has not afforded me much opportunity for forming a judgment on the manner in which he has managed his circle, his reports being meagre, and scarcely, I fear, doing himself full justice, and his circle not being on any of the main lines of traffic is thus removed from observation. If, however, a conclusion may be drawn from the Interruption Reports, it will be seen, that in the very important item of keeping his lines free from interruption, the Scinde Circle stands second on the list, a result largely to his credit.

213. Messrs. Moberly, Bence, and Lane, during the four months they have held circle charge, have given me no grounds for regretting the recommendation which led to their promotion.

SECTION VIII.—FINANCE.

214. *Introduction of the New System of Estimates, Budget, Audit, and Accounts.*—Under the system of financial arrangements for this department in force up to the commencement of the past official year, advances were obtained under monthly estimates, prepared by the Superintendents of Circles, which, after check by the Head of the Department, were submitted to the Supreme Government for sanction. This sanction, when obtained, was communicated to the local Governments concerned, on whose authority the necessary advances were placed at the disposal of superintendents from the various treasuries, in the proportions stated as required from each.

215. These advances were drawn upon by the superintendents as funds were required for the payment of bills, but were not available beyond the month for the expenses payable during which they had been obtained, all undrawn balances then lapsing.

216. The bills, after payment as above, were forwarded to the Head of the Department for audit, and after return to Superintendents of Circles were charged in the accounts current, and accompanied them to the Accountant General as vouchers.

217. A new system of accounts was introduced, on the 1st May 1861, simultaneously with the new Budget system.

218. The object of the new Budget system was to render the limitations on the expenditure of departments more stringent than previously, by the creation of a special department, termed the Audit Board, for restricting the expenditure of the year to the limit within which sanction had been obtained.

219. The principles which were to regulate the methods of accounts of the department were laid down in paragraphs 5 and 11 of the Budget and Audit Committee's Reports of 15th October 1860 and 22d February 1861. These were in general feature as follows: The audit of the bills and the examination of the accounts, which had been partly departmental and partly under the Civil Auditors of Governments and Provinces, were conducted by the Auditor General with the aid of a special assistant, who had also the like duties to perform in respect of the accounts of the Post Office. As, however, the specialities of this department necessitated some departmental supervision over expenditure which it was not to be expected could be efficiently checked by clerks devoid of departmental training, the establishment which had been employed under the head of the department in the audit of its accounts was continued for the purpose of conducting a preliminary audit, the head of that branch of the Director General's Office receiving the title of Compiler of Telegraph Accounts.

220. The theory, therefore, was the transfer of all departmental expenditure to independent control; but in reality no change was made except to transfer fixed charges, as of salary, from the Civil Auditors of Governments and Provinces to the Civil Auditor General of India;—the amount so transferred being very exactly one-eighth of the total expenditure of the department, the remaining seven-eighths in reality still remaining under departmental audit.

221. Although the arrears of accounts had during the previous official year been much reduced, viz., by *Rs.* 6,53,922. 5. 6., yet those which remained at the commencement of the year under report were sufficiently heavy to offer a serious obstacle to the introduction of the new system, which entailed heavy labour, from the many new forms and the numerous explanatory letters that became necessary.

222. Through the unremitting exertions of Mr. Lima, the head of the Account Branch of my office, it was found possible, simultaneously with the preliminary audit of current accounts on the new system, to reduce the arrear accounts during the year by 2,37,399 rupees.

223. It was found very shortly after the introduction of the new system of accounts that they required modification in some important points.

224. The method of obtaining funds for the payment of bills was, as before, by credits on treasuries, and, as before, the credits lapsed on the termination of the month for the expenditure of which they had been demanded; but there was this difference in the two cases, that whereas these credits under the old system provided for the payment of advances, those under the new system were for the payment of expenses actually incurred, whether as salary or as contingency; and the lapsing of letters of credit through uncontrollable delays in the submission of bills, whether owing to the great postal distance between Calcutta and the offices concerned, or other causes, led to extreme inconvenience to the persons the payment of whose salaries or actual expenditure was thus refused at treasuries.

225. To remedy this, it was therefore arranged that the currency of letters of credit should be available without limit of time in payment of the bills for which the credits had been issued.

226. It was also found necessary in the Pegu and Scinde Circles, owing to the long time occupied in postal communication in those provinces, to issue one letter of credit only for the entire of each circle, payment of the bills of offices in the interior being made from treasuries on the authorities of telegrams addressed by superintendents to the treasury offices, and on salary or other bills presented in duplicate by the payees—the countersignature of superintendents to the bills, elsewhere held to be indispensable to payment, being in these cases waived. This change was simply a return to the old method of obtaining funds.

227. These payments are adjusted by transfer receipts given to the treasuries in the interior by the headquarter treasury in exchange for the duplicate of the set of bills on which payment was made.

228. As the estimates of circles must be prepared from two to three months before the submission of bills, it very frequently occurs, owing to unavoidable changes in the strengths of the establishments of offices, that the amount estimated for as required at particular treasuries is less than what is subsequently found to be necessary to meet the bills payable from such treasuries.

229. In such cases great inconvenience was suffered, as, in some instances, treasury officers absolutely refused to pay any portion of such bills, even to the extent of the credit available; in the majority of cases, however, payment was made, but only to the extent provided for by the letters of credit. The result of this in the case of salary bills was, that some portion of an office establishment was paid in full, another portion in part, and the remainder not at all; the adjustment being made, at great expense of time and trouble, by the submission of fresh bills for these fractions of pay, or for the salaries which had not been paid, and by the issue of fresh letters of credit to meet them.

230. At some treasuries, when the credits were insufficient to meet the bills presented, these were nevertheless paid in full; the necessary credits being afterwards obtained, on the application of the treasury officers themselves, either direct or through the Heads of Circles—a course, in my opinion, that would have been greatly to the interest of the public service had it been followed by all treasury officers.

231. In the case of funds required for construction purposes, that is to say, as respects about one-third of the entire departmental expenditure, the new system was found wholly inapplicable, and it became so far necessary to continue the old system in use.

232. In my reply, No. 8539, of the 19th January 1861, to the request of the Civil Finance Committee for my opinion on the mode in which the accounts of the department should be audited and made up, I deprecated the introduction of any new system, believing that far more depends on the manner in which a system is worked than on the system itself; and urged that, while there appeared to me no obstacle to the improvement of the existing system where considered faulty, there were very great disadvantages in any change in a department such as this, spread over enormous geographical limits, and worked by persons with, as a rule, no knowledge of general accounts.

233. The results have justified my anticipations: the past year has been a year of con-

fusion in accounts and of extreme labour to every one in the department at all connected with them.

234. Part of this is due to the change of system, and was so far unavoidable; but much is chargeable to the absence of detailed explanations and of the minor arrangements indispensable for the success of any new scheme.

235. Indeed, it was only by the freest use of the telegraph that the new system was prevented breaking down at once; and even up to the close of the year under report, there were points in the system on which some of the most intelligent of the superintendents were still in doubt.

236. As an example of what has been stated, the following is a memorandum of the revisions of accounts-current which have been made, or proposed, or considered necessary, chiefly owing to misapprehensions of the new system:—

Indore, Dacca, and Pegu.*—The cash accounts-current for the whole year were revised.

Central India.—Intimation lately sent to the superintendent that all his accounts are wrong, and require revision.

Punjab, Bombay, and Scinde.—A revision of the cash accounts-current has been proposed by the superintendents themselves.

Madras, East Coast, and South-east Coast.—The accounts are with the Auditor General, but will most probably require revision.

237. It would be here out of place to detail the various changes which the new system has introduced into the accounts generally; but as an example of these, I will take the case of the most important of these documents, viz. the cash account-current, and will explain wherein the differences between the two systems lie, and show to what extent the changes introduced have been improvements. The comparisons are, for convenience, exhibited in parallel columns:—

OLD ACCOUNT CURRENT.	NEW ACCOUNT CURRENT.
It was simpler than the new.	Examples of the difficulty experienced in comprehending this form are given in paragraph 236.
The charges adjusted in each month were shown in the accounts-current for that month without distinction of years, such not having on the old Budget system been necessary. An additional column would have removed all objections on this score.	It was indispensable, on account of the new Budget system, that the charges proper to each year should be kept distinct. To meet this, an additional column was introduced, for the purpose of exhibiting the arrear charges of previous years.
The disbursements were, prior to audit, entered in the account in the gross as "inefficient balance," and a statement annexed showed the portion of this balance for which bills had been submitted for audit and that for which bills had not been received from subordinates; when audited the bills were written off under "construction" and "working" in detail. The body of the account-current contained, therefore, full information of the details of all disbursements, but of course frequently in considerable arrear.	The disbursements prior to audit are entered in the body of the account in the gross as unadjusted disbursements, but to each account-current a paper is attached in which are exhibited the details of all bills which have been adjusted during the month —that is to say, the details of the amount by which the inefficient balance has by the audit of bills been reduced. The entire details of the expenditure are thus thrust out of the body of the account-current.
The pre-audit system, which I recommended for adoption to the Finance Committee, would have got rid entirely of inefficient balance, and would have much simplified the account-current.	I have no idea of the object with which this change has been made. The details of unaudited disbursements, if given in the body of the account for the month in which the payment was made, would be useful; as it is, these details must always be some months in arrear. Pre-audit will remove all these difficulties.

238. In my letter to the Civil Audit Committee, referred to in paragraph 232, while suggesting that the methods of account should rather be amended than changed, I made

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* The Dacca Accounts were twice revised, and a third revision has been proposed by the Superintendent.

two proposals—the first for the introduction of free audit, which I conceived might without inconvenience be extended to the entire department; the other of a means by which the numerous petty accounts-current between superintendents and those under them might be entirely got rid of.

239. The proposal for the audit of accounts before payment was not approved of by the Finance Commission, on the ground that, owing to the great distances of many of the offices from Calcutta, inconvenient delay might occur in the payment of salaries. Its conveniences, however, were so obvious and so great, especially in avoiding the confusion caused in circle accounts from the retrenchments in bills already paid, and the trouble of effecting recoveries, that the plan has been gradually introduced during the year into the Bengal and Punjab Circles with very great advantage, and with evidence that its further extension is practicable.

240. Objections to the introduction of the system into the Pegu and Dacca Circles, based on the great postal distances from Calcutta of many parts of those circles, have been raised by their superintendents; but I have no doubt whatever that arrangements may be made to meet these cases.

241. At any rate, the gain from the extension of pre-audit to the entire department will be so great as to be well worth an effort. Much labour will be thereby saved to superintendents, and much worry to all parties in the recovery of retrenched items, and the impossibility of obtaining payment until after audit of the bills will be a wholesome stimulus to the prompt rendering and auditing of bills; and so far as the pre-audit system may be extended, it will relieve the accounts-current of superintendents of all items of inefficient balance, and will render the memorandum giving the details of bills which is attached to the accounts-current, or any modification proper for exhibiting this information in the body of the account-current itself, unnecessary.

242. The system of letters of credit which was introduced with the new accounts is retained under the pre-audit system, but it is a source of much inconvenience, as mentioned in paragraph 229, and might, without prejudice to Budget requirements, be replaced by a mere monthly list of the amounts passed.

243. The abolition of the system of letters of credit would render the following documents unnecessary :—

1st.—The monthly estimates from the Superintendents of Circles to the Director General.

2nd.—The Director General's separate estimates from the several Circles forwarded to the Accountant General.

3rd.—The advice sent from the Director General's Office to Superintendents of the date on which applications for credits had been sent.

4th.—The issue of credits by the Accountant General to the several Treasuries from which funds are required.

5th.—The registry in the Accountant General's Office of the above issues.

6th.—The Treasury Officer's endorsement of the extent by which the credit had been drawn on, and the balance which remained undrawn and cancelled.

7th.—The Treasury Officer's register of the above.

8th.—The advices from Circle Superintendents to Treasury Officers of the particulars of bills countersigned by them for payment and of the balance to be cancelled.

244. Under the change suggested, treasury officers would receive advice from the Director General's Office, not of the estimated but of the actual cash demands that would be made on their treasuries; and the Accountant General's check over the progressive expenditure under the Budget would be based, not on the prospective estimates compiled in the Director General's Office from the Circles' estimates, but on the actual expenditure.

245. The vexations arising from these credits mentioned in paragraph 229, and the consequent necessity of issuing fresh credits, fresh advices, and so on throughout the series of documents already enumerated, would under the change be also avoided.

246. Under the pre-audit system, the submission of detailed bills in duplicate seems unnecessary. The duplicate is required as a voucher by treasury officers, but surely an ordinary receipt should serve the purpose just as well; and the saving both of labour and stationery produced by the substitution would be great.

247. The second of the propositions referred to in paragraph 238 as having been made to the Finance Committee was that each assistant, having contingent disbursements, should be furnished with a standing advance out of which to make all necessary cash payments. By such an arrangement the necessity of advances by the Head of the Circle to those so situated under him, and of the numerous accounts-current to which these advances gave rise, was avoided.

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248. This proposal was approved, and a standing advance of 50 rupees was allowed to each head of a telegraph office and line inspector liable to contingent expenditure. The amounts being, however, in some cases, much in excess to the requirements of assistants, and in others in defect, a redistribution has become necessary. Superintendents of Circles have been called on to submit revised scales, and when the allowance has been readjusted to actual requirements, no objection will remain to the immediate extension of the pre-audit system, so far as the contingent disbursements are concerned, to every Circle of the department.

249. The system of permanent advances was merely intended to meet the case of contingent working charges; but its convenience proved so great that it was departmentally extended to that of construction also, the advance being permanent until the completion of the construction, when it is refunded to the nearest treasury. By this arrangement delays in the submission of accounts is prevented, the accounts are closed monthly, and no sums can at any time be held by sub-officers in excess of the amount of standing advance.

II.—Expenditure.

250. The charges of the Department for the year were as follows :—

PARTICULARS.	Establishment.			Contingencies.			Total.		
On Working Account.	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
For General Superintendence, being charges on account of the Director General and the Account, Complaint, Fault, Cash-checker and Service Message Examiners' Branches of his office	48,360	4	–	1,816	15	–	50,177	3	–
For General Store Branch, being charges on account of the Store Superintendent and his office establishment, and for supply of Stores to the department, but chiefly to the Bengal, Punjab, Pegu, Dacca and East Coast Circles - - - - -	14,844	–	–	86,892	4	9	1,01,736	4	9
For the General Printing-office. being charges on account of the establishment, and for supply of forms, &c., to the department, and for cost of publication of the departmental Gazette, circulars and orders - - - - - - -	6,356	8	9	8,405	12	4	14,762	5	1
For Divisional and Circle Superintendence, and for all Signal offices (including about 35,000 rupees office rent, and about 7,000 rupees horse and travelling allowance) - - -	6,59,857	15	1	1,62,161	5	–	8,22,019	4	1
For Line charges, including annual repairs - - - -	2,25,259	11	8	2,01,607	5	2	4,26,867	–	10
Total of Working Charges - - -	9,54,678	7	6	4,60,883	10	3	14,15,562	1	9
On Construction Account.									
General Store Branch, for supply of posts and materials, and for freight on imported stores, including also inland freight -	-	-	-	27,318	6	8	27,318	6	8
Construction of new lines - - - - - - -	-	-	-	54,566	3	2	54,566	3	2
Re-construction of old lines - - - - - -	-	-	-	1,37,718	7	3	1,37,718	7	3
Total of Construction Charges - - -	-	-	-	2,19,603	1	1	2,19,603	1	1
Grand Total - - - *Rs.*	9,54,678	7	6	6,80,486	11	4	16,35,165	2	10

251. As respects the distribution of the charges, reliable information was not available from the Accountant General's office. It had, therefore, to be sought from the Superintendent of Circles; but up to the date of printing, the information could not be obtained either from the Scinde or Pegu Circles. The Statement as respects the distribution as well as the totals is, consequently, open to small corrections as respects these Circles.

252. In addition to the charges proper to the year, payments were made on account of previous years to the following extent :—

	Rs.	*a.*	*p.*
On Working Account - - - - -	17,614	1	5¾
On Construction Account - - - - -	9,173	15	–
Total - - - *Rs.*	26,788	–	5¾

253. In order to render comparable the working expenditure on account of establishments for the year under report with that for the two years immediately preceding, some corrections are required to the statements of expenditure given in the reports of those years by the deduction of items of charges not common to all three years, or not properly chargeable to the working establishment expenses.

254. In the report for 1859-60, the item, Temporary Workshop Establishment, has been included with working charges, but excluded from those charges in the two following years. Again, Office Rents appear among the establishment charges of 1859-60 and of 1861-62, but are excluded from those for the intervening year.

255. Making

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255. Making the corrections required on account of these two items, the charges on account of working establishments for the three years stand as shown in the following Table :—

	1859-60.	1860-61.	1861-62.
Establishment expenses as exhibited in the Reports - - - - - - - -	*Rs.* 10,57,452	*Rs.* 8,81,005	*Rs.* 9,54,678
Deduct,			
Temporary workshop establishments - -	12,126	—	—
Office rents - - - - - - -	44,148	- - -	38,747
Total - - - *Rs.*	56,274	- - -	38,747
Actual expenses of working establishment -	10,01,178	8,81,005	9,15,931

256. The working expenses of the year under the head Establishments are, therefore, 85,247 rupees less than those for the year 1859–60, and 34,926 rupees in excess of those for the year 1860-61.

257. This excess in expenditure over that for last year is due to a general increase in the pay of the higher grades of the department, as well as to increases of a less general nature to that of persons in the signalling grades consequent on the re-organization.

258. The absence of any information on the subject of the contingent charges of 1859–60 does not permit of the comparison being extended to this item.

Revenue.

259. The collections on account of service and private messages during the year were as follows :—

	Rs.	*a.*	*p.*
Service - - - - - - - - -	1,25,841	7	5
Private - - - - - - - -	5,48,582	12	1
Total - - - *Rs.*	6,74,424	3	6

260. The above excludes all payments on account of the messages sent by the officers of the department on its business, as well as the Ceylon Government share of the collections on account of messages which in any part of their course have to enter the lines of that Government, the amount of the former being refunded on audited bills, and neither, therefore, exercising any real influence on the income of the department.

261. The statement of course includes the receipts by the Ceylon Government lines on account of the lines of this department.

262. A comparison of the above receipts with those of the previous year exhibits an increase of *Rs.* 6,359. 14., or 5·32 per cent., on account of service messages, and of *Rs.* 42,860. 13. 11., or 8·47 per cent., on account of private messages. The total increase being *Rs.* 49,220. 11. 11., or 7·87 per cent.

263. The proportions of the increase on account of private messages alone due to the several Circles are as follow :—

	Rs.	*a.*	*p.*		
Bengal - - - - - - -	15,923	5	9	or per cent.	10·90
Bombay - - - - - -	1,661	–	2	„	1·11
Madras - - - - - - -	2 554	12	3	„	3·66
Pegu - - - - - - -	9,934	1	2	„	93·33
Central India - - - -	4,914	3	–	„	32·45
Dacca - - - - - - -	3,805	8	3	„	95·79
East Coast - - - - - -	1,889	–	10	„	6·78
Scinde - - - - - - -	79	13	6	„	0·61
South-East Coast - - - -	1,838	2	6	„	55·27
Collections due by Ceylon - -	6,870	13	11	„	57·29
Total - - - *Rs.*	49,470	13	4	or per cent.	9·78

264. From

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264. From this has to be deducted the decreases in the collections of the following Circles :—

	Rs.	a.	p.		
Punjab - - - - - -	644	6	5	or per cent.	2·03
Indore - - - - - -	5,965	9	–	„	24·64
Total - - - Rs.	6,609	15	5	or per cent.	1·30

☞ 265. The above results are exhibited in detail in Appendix S., which shows the working of the year under report, as contrasted with that of the preceding year.

266. The largest proportions of increases are those in the Dacca and Pegu Circles, and are, doubtless, due to the connexion of the latter province with India, by the laying of the submarine line between the Western Borongo and Ramree Islands, as mentioned in paragraph 14 of last Report.

267. The increase of 55·27 per cent. in the collections of the south-east coast line, and that of 57·29 per cent. on account of this Department in the offices of the Ceylon Government lines, are in part due to the opening of the line to Tuticorin, but chiefly to the number of messages sent by merchants residing in that neighbourhood, regarding the rates for cotton, contracts and freights for cotton, money demands for cotton, &c. &c.

268. The decrease in the collections of the Indore Circle may be ascribed to depression of the opium-trade, as also perhaps to the increased duty on it.

☞ 269. It should be borne in mind, that although the river lines are almost exclusively employed on the business of the Marine Department, no portion of their cost, or of that of the establishment or boats employed in the service of those lines is borne by that Department, nor are the messages transmitted along those lines on account of that Department charged for, or credit taken for their value, in the departmental accounts.

270. From the statement given as Appendix T., it will be seen that whereas the working expenses of all natures for the year have been *Rs.* 14,15,562. 1. 9., the income from all sources has been *Rs.* 6,96,691. 1., or 49·216 per cent. of the expenditure.

271. As it was not found possible to distribute the charges on account of the messages sent by officers of the Department on its business, under the heads of Line and Office Contingencies, it became necessary in the above statement to retain as income the receipts from departmental messages, and in the disbursements the amount refunded by audited bills on account of these messages. Deducting these amounts, the working account will stand as follows :—

	Rs.	a.	p.
Working expense of the year - - - - -	14,05,422	15	–
Receipts - - - - - - - - - -	6,86,551	14	4

These last being 48·85 per cent. of the working expenditure.

SECTION IX.—GENERAL MANAGEMENT.

272. This will be best illustrated by the circular instructions issued to the Department during the year, so far as they affect its general management. Copies of those, with such corrections as have been made on re-issue, and numbering 20, are given in Appendix V. Those excluded are 61 in number, and are such as were either of a temporary character, or on matters of audit and account; and which, being in no way peculiar to this Department, can throw no light whatever on the character of its administration.

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LIST OF CIRCULARS.

No. of Circular.	SUBJECTS.	Illustrating Paragraph.
31	Classification of messages and precautions in respect of confidential messages - - - - - - - - -	91
108	Prohibiting certain liberties being taken with signalling instruments.	
113	Arrangements whereby early reply may be given to complaints.	
115	Introducing Madras time as the telegraph time for all India -	121
117	On the disuse of salt in batteries.	
118	Giving a table of electrical resistances, and explaining its applications.	
119	Limiting the amount of fines inflicted on signallers - - -	205
120	Introducing new forms of reports of cash collections.	
121	Prescribing a vernacular notice of undelivered messages addressed to natives - - - - - - - - -	104
126	On the fines to be inflicted on signallers, &c., for error or loss in messages - - - - - - - - -	97
130	Precautions when signalling names, &c. - - - - -	94
127	Prohibition to the translation by signallers of the messages of native senders - - - - - - - - -	131
140	Correction of an error in the mode of charging for messages.	
143	Introducing a change in the arrangements of Siemens' Morse instruments - - - - - - - - -	156
143½	Directing a copy of every newspaper or periodical, which contains unfavourable notices of the Department to be sent to the Director General, with explanation.	
144	Relaxation of the rule respecting the signatures to messages in respect of ships passing telegraph stations - - - -	132
145	Prohibiting abbreviations in signalling - - - - -	133
147	Enjoining civility and courtesy in the official intercourse of the Department with the public.	
148	Introducing a form of printed letter to be used when returning messages for amendment.	
No. 1 (new series.)	Extending the period within which refunds will be made, and introducing the office date into messages free of charge -	93

DEPARTMENTAL ORDERS.

273. In paragraph 204 of last Report it was mentioned that, since the 1st January 1861, the departmental orders had been issued in a printed form.

274. As, however, it is never necessary to communicate such orders *immediately* to others than the persons affected by the orders or responsible for their execution, it is obviously sufficient, for the general information of the Department and record, if these orders are published periodically.

275. This view has accordingly been acted on since October 1861, from which date all orders susceptible of such treatment have been published in a tabular form at the close of each month.

276. The orders are besides at once communicated to the persons concerned by printed forms, corresponding with the six forms made use of for their monthly tabulation in the departmental orders. As an example of the abbreviation which becomes possible by thus tabulating orders, the entire of the orders issued to the Department during the last month of the official year are given as Appendix W.

(signed) *C. Douglas*, Lieut.-Colonel,
Director General of Telegraphs.

APPENDICES to the ANNUAL REPORT on the Administration of the ELECTRIC TELEGRAPH, for the Year 1861-62.

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APPENDIX A.

From the Civil Finance Commission, to *C. H. Lushington*, Esq., Secretary to the Government of India, Financial Department, No. 442; dated Fort William, 8 June 1861.

IN paragraphs 14 and 15 of our Report on the Budget of the Electric Telegraph Department, we adverted to the expense which is incurred in keeping up establishments at the intermediate offices for messages sent from one principal station to another (for example, from Calcutta to Bombay) through those intermediate offices.

2. We remarked that these establishments could be saved, and the intermediate offices be worked at a trifling expense, if they could be restricted to transmitting their own messages, while the principal offices were placed in direct communication with each other.

3. We thought that this direct communication might be helped by recourse to insulated lines.

4. Furthermore, we alluded to the facility which the Morse* instrument seems to afford for connecting the relay stations on a long line so as to send a message the whole distance without using the establishments at the relay stations.

5. On these professional matters we could only throw out suggestions without venturing to offer an opinion.

6. In the same spirit we could now solicit attention to an article in page 141 of the "Mechanic's Magazine" for March 1861, which seems to show that messages are now transmitted in Europe from one extremity to another of a long line of telegraph by means of mechanical appliances only (*i. e.* without human agency), at the intermediate or relay stations, and that this is effected on a principle somewhat similar to that which we conceived to be involved in Sir William O'Shaughnessy's description of the Morse instrument, as quoted in the margin of our 4th paragraph.

7. The article in the "Mechanic's Magazine," to which we have referred, describes how Colonel Shaffner, at a late meeting of the Royal Geographical Society, illustrated the electric circuits. In the second part of his subject Colonel Shaffner showed the process "of combining two or more electric circuits together so as to overcome distance and to avoid the re-transmission of despatches by the hand." The experiments were designed to show that by such a combination of short circuits direct communication might be maintained, for commercial purposes, between extremities of the long line of the North Atlantic Telegraph. It is stated that "the experiments were very successful and were highly appreciated by the large and distinguished auditory." In conclusion, Colonel Shaffner said,—"The respective circuits of the North Atlantic Telegraph will be within the bounds of known practicabilities, and we have no reason to expect other than the fullest success, and the attainment of a calculated celerity. There are no air lines or lines constructed on poles that work in circuits more than 500 miles. There is no retardation on such lines. The telegraph from London to St. Petersburgh is about 1,900 miles, and upon that range there are eight relay stations. From London to Odessa the telegraph is about 3,500 miles, and there are about 14 relay stations; from London to Constantinople it is about 3,200 miles, and there are about 12 relay stations. It is a common occurrence to work to the stations mentioned through the aid of mechanical contrivances. It is in this manner that telegraphic manipulations overcome long distances, and although the original electric spark will not leap with one bound from continent to continent, by the North Atlantic Telegraph the intelligence will pass between the hemispheres with a celerity commensurate with the wants of the age."

8. Colonel Shaffner, who thus shows that direct communication through long distances is practicable for ordinary uses, had previously for many years contended that a circuit of 2,000 miles cannot be practically employed with the known sciences for commercial telegraphy. His present views, therefore, appear to deserve attention, founded, as they are, on actual experiment, and bearing, as they do, on the means of economy in the Telegraph Department.

9. It is not merely for the financial saving that direct communication by telegraph is desirable between Calcutta or Madras and Bombay, and between other principal offices; the

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* "The Morse instrument repeats automatically a message received from one station, and sends it on to the next with renewed electric power, thus sparing the labour and delay of repetition by signallers, and avoiding the errors which manual repetition often causes."

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the gain in efficiency would also be great. The bulk of the messages consists, we apprehend, of those between Calcutta and Bombay, and a large staff of signallers is retained accordingly in Calcutta and at Bombay. Now the messages from these two offices converge on the intermediate offices, which, instead of each having as many signallers as the Bombay and the Calcutta offices, have fewer signallers. Under these circumstances, mistakes or delays in the intermediate offices are perhaps to be expected, and thus the public may estimate the working of the Department by any failures of the intermediate offices rather than by the efficiency of the Presidency offices, for the strength of a chain is that of its weakest part. Direct communication between Calcutta and Bombay, between Madras and Bombay, &c., would obviate this disadvantage.

We have, &c.
(signed) *R. Temple*, President.
H. Sandeman, } Members.
R. H. Hollingbery, }

(No. 8150.)

Forwarded to the Officiating Director General of Telegraphs in India for report. Original papers to be returned.

By Order,
(signed) *C. H. Lushington*,
Secy. to the Govt. of India, Finl. Dept.

Fort William, Financial Department,
3 July 1861.

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to *W. Grey* Esquire, Secretary to the Government of India, No. 3102 A, dated 4 March 1862.

Replying to the Civil Finance Commission's No. 442, of the 8th June, received under Financial Secretary's Docket 8150, of the 3d July, No. 1861, directing attention to an article in the " Mechanic's Magazine " for March 1861, and suggesting that the method of working Morse instruments recommended by Colonel Shaffner should be adopted in the Government telegraphs in this country.

2. Colonel Shaffner, though connected with telegraphs in America, and author of a book on the subject, comprising 150 pages of large octavo, is not considered, I believe, an authority on the subject of telegraphs, and any recommendation he might make would require other support than his name to recommend it to the attention of professional men.

3. It so happens, however, that the principle of automatic working has, since its invention in 1837, been in use wherever the Morse system has been introduced.

4. Colonel Shaffner could not have been ignorant of this fact, assuming him to have any practical acquaintance with the Morse system of telegraphs, or assuming him to be the author of the very meagre section of his volume on the telegraph which describes the Morse system, of which authorship, however, there may be doubts, as he has publicly acknowledged that the electrical portion of his volume, which is of very low order and very erroneous, was not written by himself.

5. The probabilities are that his lecture to the Geographical Society had no other object than to popularize a subject at the time exciting much interest in England, viz., the re-establishment of communication by telegraph between England and America.

6. The principle of automatic working which he refers to was introduced into India with the Morse system of telegraph instruments in 1857, and has since been generally practised.

7. It is a mistake to suppose, as is done in the 6th paragraph of the letter under reply, that the operation is independent of human agency. Although the signals are transmitted automatically this can only be done so long as the instrument is in good adjustment, and a signaller is indispensably necessary at the instrument to watch the adjustment of the portion chiefly concerned in the automatic transmission, viz., the relay.

8. In paragraph 7 it is stated that Colonel Shaffner " showed the process of combining two or more electrical circuits together so as to overcome distance and to avoid the re-transmission of despatches by the hand." The process is very simply explained and illustrated in the annexed* extract from Turnbull on the " Electro-Magnetic Telegraph," a work published in Philadelphia in 1853, but the arrangements are in practice much more complicated, as will be seen from the plate of connexions* of three stations working in W., one of

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* It has not been considered necessary to give either the extract or the plate of connections.

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of a set prepared by Messrs. Siemens in view to illustrate the use of their Morse instruments, and which accompanied those instruments to this country in 1857.

9. Colonel Shaffner is, in paragraph 7, quoted as saying :—"There are no air lines or lines constructed on poles that work in circuits more than perhaps 500 miles," or in other words, that the greatest distance through which effective signalling can be conducted is 250 miles (for the circuit includes the direct distance along the wire and the return of the current to its starting point, through the earth). On such a subject there is nothing absolute, the distance depending on the size of the conducting wire, on the nature of the insulation, on the state of the weather, on the sensibility of the instrument, and on the battery power used. In Europe, with good porcelain insulators, and No. 8 wire and 40 Daniell's Elements, a distance of 300 miles can be worked over in average weather, and 200 miles during the worst weather; whereas in India, with 60 Daniell's Elements and No. 1 wire used *uninsulated* although it offers only $\frac{3}{10}$ of the resistance to the current offered by No. 8 wire, we have in bad weather difficulty in working over distances of 120 miles, while in the present fine weather, with 20 Daniell's Elements, we can work over a distance of 400 miles, and a single Daniell's Element will suffice for transmission through a well insulated submarine line of 500 miles in length.

10. In paragraph 8, Colonel Shaffner is quoted as having "previously, for many years, contended that a circuit of 2,000 miles cannot be practically employed with the known sciences for commercial telegraphy." He here clearly refers to submarine lines; his meaning is, that telegraphic communication cannot practically be conducted through such lines between places 1,000 miles apart. This statement had in view, no doubt, the failure of the Atlantic cable. The causes of its failure are now known, and no doubt is entertained of the possibility of signalling at reasonable speed through a properly constructed cable of even 2,000 miles in length, although the "inductive" difficulties in such a cable would be sixteen times as great as those offered in Colonel Shaffner's limit, mentioned below. I notice this statement in view to show that the Civil Finance Commission have misapprehended its purport, and that it gives no foundation for the change of views they impute to Colonel Shaffner.

11. He has stated his belief that direct signalling, or signalling in a single circuit, was only practicable in the case of air lines through circuits of more than 500 miles, or to distances not exceeding 250 miles, and in the case of submarine lines through circuits of more than 1,000 miles or to distances not exceeding 500 miles. In neither case is there anysuch limit as has been already explained, but there is no reason for supposing that Colonel Shaffner at any time doubted the possibility of *indirect* automatic signalling over distances 10 or 12 times greater than the above, that is, through 10 or 12 separate circuits automatically connected.

12. Seeing from the examples given in the extract from Colonel Shaffner's lecture that automatic signalling is employed in Europe over distances of from 1,900 to 3,200 miles, it may perhaps be asked why the same is not always practised in India. The reply is, that unless a special wire connecting the distant places with each other is available the local business at the intermediate stations is sure constantly to interfere with direct automatic transmission.

13. As a rule, work between Calcutta and Bombay is carried on automatically through the following sections of the line, viz., Calcutta to Benares, Benares to Agra, Agra to Indore, Indore to Bombay. In the first-mentioned section, the five following separate circuits are automatically combined, viz., Calcutta to Burdwan, Burdwan to Raneegunge, Raneegunge to Burhee, Burhee to Dehree, Dehree to Benares. In the 2d section, the four following separate circuits are similarly combined, viz., Benares to Allahabad, Allahabad to Cawnpore, Cawnpore to Futtyghur, Futtyghur to Agra. In the 3d section, the four following separate circuits are combined, viz., Agra to Gwalior, Gwalior to Seepree, Seepree to Beora, Beora to Indore; and in the 4th section, the five following separate circuits are similarly combined, viz., Indore to Ackberpore, Ackberpore to Dhoolia, Dhoolia to Malliagaum, Malliagaum to Nassick, Nassick to Bombay. The sections through which automatic communication with Bombay is *occasionally* carried on are Calcutta to Agra, and Agra to Bombay, in each case through nine separate circuits automatically connected, and it will, at rare intervals, occur that the line is entirely disengaged, and that "through" automatic communication between Calcutta and Bombay is practicable. This happens owing to the work at all the intermediate offices having been cleared off, and each office as it becomes clear "joining over" as it is termed for automatic communication, as is always done when an office is clear. In the case just mentioned (the line to Bombay) there are eighteen separate circuits automatically connected, whereas in the instance of the longest line which Colonel Shaffner has quoted, viz., that from London to Odessa, there are but fourteen. Now the difficulty to automatic transmission is entirely independent of the distance separating stations, provided this is not too great for decided signals, and depends solely on the number of separate circuits, that is, of sets of instruments worked through; and assuming the stations to be 250 miles apart, which is Colonel Shaffner's limit, and which with adequate insulation would present no difficulty in India, the working effectively

between Calcutta and Bombay would be equivalent to effective working over a distance of 4,500 miles. The distance from London to Odessa is about 2,200 miles,* and not 3,500 as stated by Colonel Shaffner, consequently the efficient automatic working of the eighteen local circuits between Calcutta and Bombay is equivalent to automatic working from London to a distance more than double of that to Odessa.

14. The power to work automatically through so many circuits as 18, rarely, however, continues perfect for any length of time. Some one or other of the relays is pretty sure to require adjustment from currents of terrestrial or atmospheric electricity of varying intensity passing along the lines, and the signallers at intermediate stations having, while through work is in progress, no work in their own offices, neglect to keep that close watch on the adjustment of the relay which is absolutely indispensable to successful automatic transmission, a single instance of which neglect at any one of the 18 intermediate offices of course puts a stop to through communication.

15. The impediments to direct automatic transmission, raising from intermediate traffic on the lines, would also seem to occur in Europe, although it is there usual to devote a special wire to exclusive direct communication between important places. This is the case in the German and Austrian Telegraph Confederation, distinct wires being devoted to the exclusive service of the traffic between the several countries included in the union; were it otherwise, what explanation could be given of the fact, as shown in the marginal extract, that the quickest message on record between London and Malta, a distance *viâ* Italy of 1,400 miles, had occupied four hours in transit?†

16. Another impediment to automatic transmission in India has till very lately existed. I allude to the practice of tying up a certain spring fixed to the under-side of the recording lever of the Morse instrument, and whose sole purpose was to render automatic transmission a possibility. The important part played by this spring in automatic transmission does not appear to have been explained to the assistants trained at Gresham House, by whom a knowledge of the Morse instrument was introduced into India; and as the spring in question by acting as a damper to the sounding lever tended to render the operation of reading by sound less easy, the slight inconvenience which its presence caused was got rid of by tying it up, thereby preventing all motion in it, and, consequently, preventing automatic transmission through more than three or four stations except, at so slow a rate of signalling as to neutralise all benefit derivable from the automatic transmission.

17. There is, however, a difficulty in automatic transmission peculiar to the Indian Government lines. These lines offer the only example in the world of lines entirely devoid of insulation. During the rains the current with the largest batteries that can be employed frequently fails to produce decided indications on the relay of the next station. As a consequence, some of the beats at that station fail, and as such failed beats are omitted in the automatic transmission at the next station, and as additional beats are in each such onward transmission also left out, the result of automatic transmission through 18 successive instruments, as on the line hence to Bombay, would not merely be to render the message unintelligible, but in extreme cases the message would, during transmission, entirely disappear.

(signed) *C. Douglas*, Lieutenant Colonel,
Director General of Telegraphs in India.

Extract from the Proceedings of the Right Honourable the Governor General of India in Council, in the Home Department (Electric Telegraph), No. 3233; under date 30 June 1862.

‡ Copy forwarded to the Financial Department under Endorsement, No. 1753.

Read again resolution‡ of this Department, dated the 18th of July 1861, on communications from the Civil Finance Commission:—One, submitting copy of their Report on the Budget of the Electric Telegraph Department for 1861-62; the other, treating of certain alterations in the Electric Telegraph Department considered to be feasible.

Read the Reports of the Director General of Telegraphs in India on the above-mentioned communications, viz.:—

(A.)—No. 3012 (A), dated 4 March 1862, and (B.)—No. 206, dated 17 May.

Resolution.—The Governor General in Council having considered the proposals of the Civil Finance Commission in regard to an alteration in the rates charged for telegraphic messages, and the information upon that subject contained in paragraphs 29 to 34 of Colonel Douglas's letter of the 17th May, is of opinion that it would not be advantageous to act upon the recommendation of the Civil Finance Commission.

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* *Vide* the account of the Telegraph Soiree held at Manchester on the 7th of September 1861, in the "Mechanic's Magazine" for that month, page 176, column 3.

† Extract from the "Malta Times," 12 December 1861.—"On Thursday the 5th instant the Admiral received a telegram from the Lords of the Admiralty in four hours. This is the quickest message that has yet been received from England."

The Governor General in Council is also satisfied that the proposal to dispense with the use of the intermediate offices in transmitting messages between Calcutta and Bombay, and between Madras and Bombay, advocated by the Civil Finance Commission, is quite impracticable.

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Ordered, that copies of the letters marked (A) and (B) be forwarded with a copy of this Resolution to the Financial Department for information.

Ordered also, that copies of this Resolution be sent to the Civil Finance Commission and to the Director General of Telegraphs for information.

Appendix B.

From *W. Grey*, Esq., Secretary to the Government of India, Home Department, to the Secretary to the Bengal Chamber of Commerce, dated 12 June 1861.

I am desired to request that the Calcutta Chamber of Commerce will favour the Governor General in Council with their general opinion as to the efficiency of the electric telegraph for commercial purposes, and that they will be good enough to furnish a statement of the total number of messages sent or received during a given period, say from a week to a month previous to this date, by any firms or establishments connected with the Chamber, showing what proportion of them were delivered with reasonable punctuality and correctness, and in what proportion any delay or error occurred so material as to detract from the commercial value of this means of communication.

2. His Excellency in Council desires me to add that, if the Chamber have any suggestions to offer for the improvement of the Telegraph Department, the Government will be glad to receive them.

(A similar letter was addressed to the Chambers of Commerce at Madras and Bombay).

From *H. Brooke*, Esq., Secretary, Bombay Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India, Home Department, dated Bombay, 5 August 1861.

By direction of the Committee of the Chamber of Commerce, I have the honour to acknowledge receipt of your letter No. 1176, dated 12th June 1861, requesting a statement of the total number of messages sent or received by the members of the Chamber through the electric telegraph during a given period, and desiring suggestions for the improvement of the establishment.

The Committee have circulated your letter to the members, and have received returns from 25 firms giving the following results:—

	Messages.
Received with reasonable punctuality and correctness - - -	274
With important errors or delays - - - - - -	16
Unintelligible, or so delayed as to be rendered useless - - -	8
Total received between 1st April and 31st May - - -	298

Since the above period the delays have been very considerable on most of the lines, but more particularly on that between Bombay and Calcutta, where messages have not unfrequently taken six to eight days in transmission, and in several instances nine or ten days.

It appears to the Committee that, where the contents of the messages are of no value to others than the addressee, and where the construction of the message is simple and grammatical, there is but little ground for complaint; but it would seem that, where the temptations to divulge the contents of important messages were considerable, and had been systematically brought to bear on the *employés*, their integrity was found to give way.

The Committee feel it difficult to suggest to Government a remedy for this state of things; but as complaints of similar delinquencies are not frequent in England, they would venture to suggest that the establishment of a secret committee under the guidance of an experienced officer trained in England would probably have the effect of bringing to justice the real authors of these frauds. At the same time the Committee believe that an increased rate of salaries to the lower officials, with the prospect of rewards for exemplary conduct, would raise the general character of the establishment, and greatly promote its efficiency.

A copy of the return by the members is herewith forwarded for your information.

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Number of Telegrams received by Indian Telegraphs during the two months from 1 April to 31 May by the following firms:

How Delivered.

Names of the Firms.	With reasonable punctuality and correctness.	With important errors or delays.	Unintelligible, or so delayed as to be rendered useless.
Messrs. Ritchie, Stewart & Co.	27	3	1
" William Nicol & Co.	29	None	None.
" Robert Strong & Co.	11	"	"
" Wallace & Co.	11	2	"
" W. and A. Graham & Co.	16	None	3 useless from delay. 1 unintelligible.
" A. H. Huschke & Co.	10	1	None.
" Lyon, Brothers & Co.	6	1	"
" Finlay, Scott & Co.	15	None	"
" Lawrence & Co.	11	"	"
" Leggatt & Co.	4	"	"
" Killick, Nixon & Co.	2	"	"
" S. Burstall & Co.	6	1	1
" W. J. Morgan & Co.	5	None	1
" Stearns, Hobart & Co.	11	8	1
" Watson, Bogle & Co.	164	16	8
" Alexander C. Brice & Co.	18	Since 15th May, the delays have been unusually great, probably caused by the monsoon.	
" Grey & Co.	6	None	None.
" Cardwell, Parsons & Co.	4	"	"
" G. S. King & Co.	We receive but few messages, and so far as we recollect we have no great ground for complaint.		
" Volkart, Brothers	33	Names several times misspelt.	None as far as we remember, but recently the delays have been great.
" Mackindoe, Rogers & Co.	5	None	None.
" Campbell, Mitchell & Co.	9	"	"
" Robinson & Co.	35	All pretty correct.	
Peninsular and Oriental Steam Navigation Company	A great number; no record kept.	None	"
Commercial Bank of India	Of the period inquired about we would not complain, but since the 30th April the delays have been very frequent; one message from Calcutta of the other day took nine days to come across.		
Chartered Bank of India, Australia and China	- - -	Many; especially from Calcutta.	Three or four within last week.
Agra and United Service Bank	No return	None	None.

From *W. R. Arbuthnot*, Esq., Chairman of the Madras Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India, Home Department, dated Madras, 7 August 1861.

I have the honour, on behalf of the Madras Chamber of Commerce, to acknowledge the receipt of your letter of the 12th June, in which you apply to the Chamber for its opinion as to the general efficiency of the electric telegraph for commercial purposes, and you request that it will furnish a statement of the total number of messages sent or received during a given period, say from a week to a month previous to the date of your letter, by any firms or establishment connected with the Chamber showing what proportion of them was delivered with reasonable punctuality and correctness, and in what proportion any delay or error occurred so material as to detract from the commercial value of this means of communication. You further state, by desire of his Excellency the Governor General in Council, that if the Chamber have any suggestions to offer for the improvement of the Telegraph Department, the Government will be glad to receive them.

I regret that I have been unable to procure the statistics for which you apply, the mercantile firms at this place not having anticipated the inquiry that has been instituted, and having kept, therefore, no separate record of the messages received and despatched by them. In the hope, however, that the information may still be useful, I have requested the members of the Chamber to record day by day their experience of the working of the Department for the current month of August, which I hope to do myself the honour of forwarding to you early in September.

The opinion of the Madras Chamber upon the general efficiency of the electric telegraph for commercial purposes is on the whole favourable.

Messages are occasionally delivered in language more or less mutilated, and for the deciphering of which the context would of itself be insufficient without a pre-acquaintance on the part of the recipient with the subject matter. Errors, too, arising from evident inattention of the signallers, but which might be productive of serious consequences, such as the substitution of the word "hundred" for "thousand," "four" for "five," and *vice versâ*, sometimes occur. Still, however, I have pleasure in repeating that upon the whole, as far as I have been able to ascertain the views of the Madras Chamber, the department has given satisfaction, and in this Presidency we have had no complaints of the messages being tampered with. Of the irregularities that do occur, I may confidently state that a large preponderance would be found in the messages transmitted from Calcutta and Bombay, while the southern and south-western lines have been comparatively free from them. I have also grounds for believing that the messages sent from hence to Calcutta would be considerably more numerous than they are were it not for a want of confidence which, to a certain extent, prevails in regard to the prompt receipt of the reply telegrams.

The frequent interruption of the North Coast and Calcutta Line has been felt to be one very serious drawback to its satisfactory working. On a late occasion the interruption extended over a period of a week, if not ten days, and this of necessity occasioned very great inconvenience.

Whatever may have been the causes in times past of such long-continued interruptions, it is hoped that a remedy, prompt and effectual, may be applied.

Believing that the expediency of telegraph stations being opened at every important commercial port along the coast has been fully recognised, the Chamber would take this occasion to bring to the notice of the Government that Cuddalore, the chief station of one of the most important collectorates in this presidency, and through which the telegraph wires are already carried, is still deprived of the advantage referred to.

There are two other practical suggestions with which I will conclude. They are as follows:—

> 1st. That the date and hour of despatch of a telegraphic message be included, if required, free of expense to the sender.
>
> 2dly. That in the case of messages delivered in an unintelligible shape, a refund be allowed, even though the repeating charge may not have been paid. The public at present has no redress unless the higher charge has been levied, and the tendency of this arrangement is to make the signallers careless in the case of ordinary messages.

From *H. W. J. Wood*, Esq., Secretary, Bengal Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India, Home Department; dated 14 August 1861.

I HAVE the honour to acknowledge the receipt of your letter No. 1168 of the 12th June, relative to the Telegraph Department, which has been circulated very generally among the commercial establishments of Calcutta; and I am directed by the Committee of the Chamber of Commerce to submit the following observations for the consideration of his Excellency the Governor General in Council:—

The Committee consider that the Electric Telegraph Service of India is deficient in the two great points which can alone render it valuable either to the Government or the commerce of the country—namely, despatch and accuracy in transmission. The Committee can only speak practically as regards the latter; and in support of their opinion they append, for the information of his Excellency the Governor General in Council, the opinions of the most of the leading merchants of Calcutta upon this subject. It is not easy to understand why the working of this service should not have improved during the six or seven years which have passed since it was first opened to the public; but, with some exceptions, the Committee, from everyday experience, believe such to be the case. They are well aware that the superior officers in charge of the service are men of ability, and zealous for its efficient execution; but in consequence of what the Committee believe to be the cause of the present unsatisfactory working of the system, namely, defective construction and bad organization, the exertions of these gentlemen are neutralized, and but of little value to the public. The Committee are of opinion that, if the construction of the line had been entrusted to persons thoroughly conversant with the European system, and not to men who, as far as this particular system was concerned, were mere theorists, the chief defects now evident would have been avoided. Can it be expected that the telegraphic communication for all India can be maintained with anything like correctness or despatch when the means of transmission is limited to the use of a single wire? and when this wire is employed by Government for many hours, as it frequently is, private messages must necessarily be detained, and their correctness endangered by the delay.

As regard the gross errors which so frequently occur in the messages, the Committee believe they are to be attributed to the mistaken policy on the part of the authorities, who, for economical reasons, have thought proper to employ, at low salaries, as signallers and copyists, persons, chiefly Natives and Eurasians, whose want of education and proper training renders them unfit for the appointments which they hold. The Committee are also informed that the inspectors employed are not sufficiently numerous to keep up an efficient supervision of the several lines in work.

It is generally believed by men practically acquainted with the working of the European system, an opinion in which the Committee fully concur, that telegraphic communication in India would be worked more satisfactorily and profitably to the Government and the public if it was intrusted to private enterprise, for which capital could readily be found in England.

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Extracts from the Opinions of the several leading Merchants of Calcutta.

In reply to your letter of the 18th instant, we beg to say that the first thing required, in our opinion, for the improvement of the Telegraph Department, is that the Superintendent should be ordered to be present in some part of the establishment whence he can superintend its working, and where he will be accessible to the public. Major Douglas at present sits in a room at the top of a three-storied house; the whole working of the telegraph is carried on below on the ground-floor; it is manifest, therefore, that he cannot be the least aware of the manner in which the work is done. On your wishing to have access to Major Douglas on business (*sic.*) is compelled to give a card to a peon at the bottom of the stairs, who carries it up to Major Douglas, and in time returns with permission to climb to the top of the house; this time being generally from 10 to 15 minutes, during which the victim has to walk about a dark damp passage, without even anything to sit down upon.

It appears to us that the work of a telegraph office is, of all others, one which requires constant superintendence and appropriate accommodation, without which no good system can possibly be carried out. We should, before any other change, recommend that a convenient telegraph office be at once provided by Government, without which the work can never be efficiently performed.

In reply to your circular regarding the Electric Telegraph, we beg to record our opinion that the two leading faults of which the mercantile community have a right to complain are—frequent delays in the transmission of messages, and an extraordinary want of intelligence on the part of those who reduce them to writing.

In a few messages which we lately exchanged with a firm at Madras, we find the following absurd blunders:—

Hydrabhay for hydraulic.
Containing for contain.
Publication for application.
Ball for bale.
Celling for calling.
And thirtieth for thirteenth.

These six errors occurred in four messages.

With regard to the efficiency of the telegraph for commercial purposes, we think that, as it is at present managed, a merchant incurs a grave responsibility who acts upon any telegram the purport of which does not tally with his preconceived notions; or in other words, that if a message reports an unexpected high or low rate of prices, it is probably a blunder of the telegraph, and cannot safely be acted upon.

With reference to your circular dated 18th June, I beg to say I have no evidence to give of the working of the Telegraph Department for the time for which Government require it, viz., from a week to a month previous to 12th June; but former experience warrants my joining in what I believe to be the general opinion, that the Telegraphic Department has been culpable of gross neglect.

That the system of telegraphic communication in India has not improved as regards the correctness of the messages and the time occupied in their delivery during the last five years, is a fact to which, I believe, the public will generally bear testimony. The merchants and bankers certainly will.

The experience of one month in the year hardly conveys an adequate idea of the almost daily blunders which occur in the transmission of messages on all the lines, especially those received from Bombay and Madras, blunders which are liable to cause losses of great magnitude to the persons sending or receiving the telegrams. The following is an instance of this, but other facts could be adduced in which the errors were more numerous. I can only speak positively to the messages received, but there have been complaints from Bombay in regard to those despatched:—

17 May to 17 June.

Messages to and from Bombay and Galle:—21 received and 17 despatched.

On the 16th, from Galle, hundreds were quoted instead of thousands of ounces.

On the 29th, from Bombay, unintelligible on 11th June, six days *en route*, and quite incorrect.

On 15th June, ditto, ditto.

Four out of those received were not only useless, but, in the instance one message, we had a narrow escape of serious loss, as, though the message received was found, when compared with original received from Bombay, incorrect, yet the sentence was so connected as to remove any doubt of its correctness when received; luckily, a later message was received the same day, which led me to doubt the accuracy of the first.

We shall be obliged by your submitting, for the information of the Chamber, the following case of imposition, for we consider it nothing less, on the part of the Electric Telegraph Office:—

We received this morning a bill of *Rs.* 7. 5 *a.* for a message alleged to have been sent to our address from Bombay. The number of the message not appearing on the face of the bill as usual, we returned it with a memorandum requesting the information, and were informed, in reply, that "the message did not reach Calcutta!" We then asked why we were called upon to pay for it, and were again informed, in reply, that "the message was duly sent from Bombay, but appears to have been lost on the road!" Our only course was to pay the bill, which we have done, and now enclose it and the memorandum for your inspection.

We

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We make constant use of the wires in directions, and, taking last month as a criterion, receive or send on the average 64 messages monthly, each ranging in length from 16 to 100 words, in many of which errors to a greater or lesser extent occur; but on the whole we are satisfied with their general accuracy.

We therefore confine our complaints to the following, received within the last few days, which we have brought to the notice of the telegraph officials without obtaining a satisfactory explanation of the cause of the blunders made in transmission:—

A message by letter from Mauritius, and correctly given for transmission by our agents in Galle, quoted a certain staple export 4 dollars per bag, but in the telegraph message it is given as 5 dollars per bag. We are aware that a neighbouring firm received a similar message in which the same error occurred, and we cannot regard this error otherwise than a wilful one on the part of some in the employ of the telegraph.

A message transmitted from London by letter to Bombay gives us a limit of 2,000 *l.*, which is delivered to us as 1,000 *l.*, and the only satisfaction we can obtain is the same as given in the former case.

Attention ought to be called to the state of the lines between Calcutta, Akyab, and Rangoon, and to the alleged fact that between this and Jessore the wires are suspended on slim bamboo poles, which give way in every storm. This line has been virtually closed for months past through constant interruption.

Our experience of its operations has led us to the conclusion that, for commercial purposes, it is not of the least use as at present conducted; the two great essentials to render it valuable to commerce being wanting, viz., certainty of transmission within a proper time, and the correct delivery of messages. We have found that messages by telegraph have frequently reached their destination only a few hours before the copy of the same by post, and sometimes not until after the copy by post had been delivered; and frequently messages are so distorted and rendered unintelligible that they are not of the least use when received.

For these reasons we have not of late made use of the telegraph as a means of communication, trusting, in preference, to the slower but more certain delivery of messages by the post

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We do get a few telegraph communications occasionally; but we have never yet received one that was of any use to us, being either totally unintelligible, or utterly useless from being "too long on the road," generally both together.

Our messages are very often too late and behind time. We had several messages from Akyab, when the cable was in order, which occupied from eight to nine days!

We have continual causes of complaint for mistakes and omissions in telegraphing our steamers, and have recently, on more than one occasion, brought them officially to the notice of Major Douglas, but without effecting any reform. On a recent occasion, also, our Madras agent telegraphed to us, prepaying for our reply. Our clerk, through inadvertence, paid here for our reply, and on pointing out the double payment, and demanding a refund, Major Douglas, on the 11th June, informed us he could make no refund here.

We have a very unsatisfactory account to give of our telegrams. They are often late, sometimes missing, and rarely correct.

We have had frequent cause of complaint.

Our experience leads us to place little or no confidence in the Telegraph Office as a means of transmitting messages.

The messages we receive are frequently unintelligible, particularly those from Galle. We think that if the hour of despatch was stated in the messages, it would be an improvement and a wholesome check to irregularities.

We do not think that the Electric Telegraph Department can be considered as "efficient for commercial purposes" as it ought to be, and as it might be made; and there is still a sufficient amount of uncertainty about the receipt and transmission of messages as to prevent its being used as much as it otherwise could be, and to constitute a great drawback on its usefulness. It is not nearly so well conducted as in England or America, where mistakes and delays are rare indeed; and though in India it probably never will attain to the same degree of efficiency as in those countries, we think that it is much more behindhand than it ought to be.

At the same time we are far from thinking it as inefficient as many may probably suppose it to be from the way in which it is abused in the newspapers, and from the cases there given (no doubt correctly) where it has failed; these cases of failure attract attention, but when all goes on well, no notice is taken.

We have referred to our accounts, and find that in 1861 we have sent telegrams—to Ceylon 19, Bombay 7, Madras 5, Mirzapore and other places in India 9, Melbourne *viâ* Galle 6, London 10 = 56 in all. These are telegrams the result of which we know. We may have received about half the above number, and the result is that the telegrams have generally been sent and received pretty fairly in point of time, and that the words have

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come generally accurate enough to be intelligible, in most cases very nearly correct, and in a good many cases quite correct. Some lines appear to be served much better than others: for instance, Calcutta to Colombo, we have sent nineteen messages, and received twenty in reply, and they were mostly in good time, and nearly all correct; probably this may be partly owing to the fact that all were to the same house, and all on the same subject. When delays and mistakes have occurred in this and former years, we have generally found them to be where we have parties telegraphed to for the first time or upon new subjects. For two years we have been sending messages to a house in London always on same subject, and they always reach regularly and correctly. Lately we sent to Bombay, for London, three telegrams at same time, one to this house, and two to new houses. Anticipating difficulty, we had written in the beginning of the year to superintendents at Bombay and Galle, and sent lists of all houses in England to whom we expected to telegraph, in order that there might be means of correcting mistakes in names. Notwithstanding this, our telegram to the old correspondent arrived correctly, but those to the new ones only reached a fortnight later and were of no value. Recently we had a message six days coming from Bombay, and one was sent from Mirzapore, and has never been received by us at all. With these three exceptions we have no special cases of complaint, but in all three it appears to us that there must have been great carelessness.

Where messages are incorrect it seems generally to arise from want of intelligence on the part of some of the employés of the department. We make allowance for mistakes in case of new and difficult matters, but such stupid blunders are sometimes made as would seem to show that the parties making them can hardly understand the English language—such blunders as are never made in England, and which the possession of ordinary intelligence would avoid.

We have referred to our own private experience of the working of the department, but we are all interested in public news, and we think the department is freely entitled to claim credit for the generally accurate despatch of public news from England, China, &c., and of commercial advices to the Chamber of Commerce from England, Bombay, and China; in the China quotations, however, mistakes are made more frequently than they ought to be.

We do not use the telegraph as much as we would do if it were more accurate, and we believe it might be made much more accurate by the employment of better men, and their better payment necessary to secure a better class. We believe the department pays a profit at present, and if so, it would be only just to improve it; we believe it would pay well also to do it, as many more messages would be sent. In cases of proved neglect, what is paid for messages certainly ought to be refunded, and part, or the whole, of such refund should be deducted from the pay of the person in fault. Good men should be employed, they should have good pay, and be told that they would lose part if they committed serious fault. This is the system in the Bank of England in the cashier's department, or used to be. The clerks were paid "risk money:" if they overpaid a cheque, or lost money in other ways, they were liable to make good the loss; if they made no mistakes, they kept the risk-money. We think that if some such plan were tried here it would be well,—the good men would like it. At present it takes some time and trouble to write in with particulars of complaint, and all that is ever got is an expression of regret, the announcement that no money can be returned, and intimation that the culprit has been reprimanded. We have generally sent in complaints ourselves, but we know of others who do not, considering that it is only waste of time as well as of money.

In reply to your favour calling on us for an expression of our opinion as to the efficiency of the Electric Telegraph for commercial purposes, we regret to say that we have no great faith in the utility of the department while under its present management, as through the frequent disappointments we have met with, in consequence of the delay or unintelligible state of our messages, we have almost ceased to make use of this means of communication, of which we would gladly and frequently avail had we any assurance that we could do so with the certainty that our messages would meet with even ordinary care in transmission. As it is, we are doubtful of the expediency of paying heavily for messages with a great chance of their miscarrying, or which may be delivered at a time not only to be of no use, but possibly of harm, as the features of the matter of which they treated may have altered. We have suffered considerably ourselves by the length of time our telegraphs to Akyab, Galle, and other places have been in transit, and we have been put to much inconvenience lately by a message from Galle to our address not having reached us until five days after its date, and then in an unintelligible form. It ran thus:—"Muster for Leeds, no shillings for Graham." The superintendent refused to ask for a repetition, though the wording in its present form is meaningless, and has no reference to our business; and when we inquired if we must pay for this worthless affair, the reply was that, "If you do not pay, you will never receive another bearing message." In answer to our complaints to the superintendent here we have generally been sent printed circulars, giving us no satisfaction or explanation whatever.

Not only in the working of the telegraph itself, but in the commonest details of the office, the greatest carelessness seems to exist; for so late as yesterday we received a letter addressed to us, enclosing a returned telegram intended for Messrs. Mackinnon, Mackenzie, and Company, while that firm were sent a message intended for us.

In answer to your circular letter of date 25th instant, wishing our opinion with regard to the efficiency of the Electric Telegraph for commercial purposes, we have to state that our own

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own experience of the irregularity and incorrectness with which very many of our messages have been forwarded has caused us to conclude that this department of Government has been inefficiently wrought. Not a few of our intended telegrams never reached their destination; and the same applies to messages intended for us from other stations. Many were incorrectly forwarded, leaving the receivers only to guess at the meaning, and some were quite unintelligible.

Regarding the punctuality and correctness in the transmission of messages by the Electric Telegraph, we have to bring to the notice of the Chamber that a message from London, despatched from Bombay on the 9th instant, reached us only yesterday evening, taking nine days for transmission; while the copy of the above message came to hand yesterday morning by the usual Bombay mail.

On several occasions we had to complain of the general management of the Telegraph Office for irregularities; we have always been told by the officials that we have to make our complaint either to Galle or Bombay, as the fault was never with them, threatening to stop all our messages if we did not pay for those that either we were overcharged for, or they came in an unintelligible language.

Despatched from Calcutta.	For Steamer.	Leaving Galle.	Reached Galle.	Number of Days' Transmission.	Remarks.
25th May 1861 -	about June 1st -	- - -	June 3d -	4	Too late.
10th June 1861 -	„ „ 12th -	Bombay -	- - -	- - -	Refused, because the line was interrupted.

Received in Calcutta.	Despatched from Bombay.	Transmission.	Remarks.
1st June 1861 - - -	30th May - - -	2 days - - -	We have seldom received an English mail message in less time.
18th June 1861 - -	8th June - - -	10 days - - -	This message took the same time as the express letter which it was intended to anticipate.

We have not tried the electric telegraph much of late, because of the unsatisfactoriness of the working of it. Above is a note of our latest messages and their result.

We have had frequent cause of complaint regarding our messages from Saugor and Galle, those from the latter station being frequently 24 hours and more behind the last of the public news. We have also had to complain that the rule which provides for private messages being sent off in the order in which they are tendered is apparently little regarded in the Galle Office, and our experience of correspondence with the department for redress of grievances (even when made in the most specific form) is most unsatisfactory. The compulsory insertion in a telegram of the date and hour at which it was despatched would, we think, be a practical benefit, and be generally acceptable, even if adding slightly to the cost of the same.

We receive messages from Bombay on arrival of every mail, which occupy three or four days in reaching us, besides receiving and sending messages from and to Bombay and other places very often: with one or two exceptions they never have reached their destination at the time they should have done so, and sometimes messages that have been sent have never reached at all; we complained at first, but never got any satisfaction, and of late have kept no record.

From *W. R. Arbuthnot*, Esq., Chairman, Chamber of Commerce, to *W. Grey*, Esq., Secretary to the Government of India, Home Department; dated Madras, 7 October 1861.

With reference to my letter of the 7th August, I have now the honour to annex a return of telegraphic messages received and despatched during the month of August, as furnished to me by three establishments,—two of them houses of business, the third a joint-stock bank:

Return of telegraphic messages.

Messages received in August - - - - - -	133

Of that number one message from Akyab came to hand in an unintelligible shape, and with

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with figures altered and mutilated; another from Rangoon was also scarcely intelligible, and two more contained trifling errors.

Messages despatched - - - - - - -	139

The fate of these messages is thus reported:—

Never delivered - - - - - - - - -	2

Of which one was addressed to Kamptee, and another to Tuticorin.

Serious and unexplained delay - - - - - - -	1

The above was a message despatched, 30th August, to Kamptee, but not delivered till 6th September.

Unremarked upon and therefore presumed to have been duly delivered -	136

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to *W. Grey*, Esq., Secretary to the Government of India, Home Department; dated 9 November 1861.

Replying to your No. 1800 of the 28th September last, forwarding copies of communications from the Chamber of Commerce at Calcutta, Madras, and Bombay, and requesting my opinion on the propositions contained in them for the general improvement of the department, and whether I consider there is any line which could, as an experimental measure, be conveniently entrusted to a private company—

2. In the letter from the Calcutta Chamber there is no definite proposition made; the allusion to the indifferent working, which the Chamber anticipate will continue so long as a single wire is the only means of communication, points to the desirability of employing a greater number. I have already alluded to the advantages to be derived from a second line to Bombay in my No. 1526 of 12th September 1861, and the earliest opportunity will be taken, on the arrival of the new insulators (which, it is understood, are on their way from England), to report upon their efficiency or otherwise for insulating a double set of wires on the same supports, in view to the sanction of Government being obtained to the employment of an additional wire on the Bombay line.

3. The Calcutta Chamber attribute the "gross errors which so frequently occur in the messages" to the employment of Natives and Eurasians; from the evidence of the Complaint Office I do not consider that gross errors are frequent as compared with the number of messages transmitted, which, during the past official year, were 2,40,451, exclusive of those on departmental service. The complaints regarding errors only, during the same period, were 139; and this, although any obstacles that may have been supposed by the public to exist to redress in such matters, may fairly be considered to have been removed since the establishment of the General Complaint Office in 1860, and which was in efficient operation during the entire period alluded to by the Chamber. In justice to the signallers I must remark, that in consequence of the absence of insulation, and the difficulties resulting from the great distances between contiguous offices, communication is sometimes only possible with signallers skilled to recognise a word from two or three of its letters, and in this way correspondence has frequently to be carried on during the rains; of course this is only possible with the best signallers.

4. Among the complaints in the extract from the opinions of the leading merchants of Calcutta, brought prominently forward as examples, I notice that four refer to the changing of figures, and are as follows:—

Thirtieth for Thirteenth.	Five - - for Four.
Hundreds for Thousands.	One thousand for Two thousand.

The liability of the telegraph to mistakes of this nature, is pointed out in Clause XVI. of the rules of the department, and the means suggested to lessen the risk of errors in this particular, are laid down for the guidance of senders of messages; and where the recommendations there given have been acted upon, I have never known a single instance of error. The European public, although well aware that repetition is desirable for the correct transmission of numbers, persistently neglect the inexpensive insurance obtained by this method, or by giving the doubles or the halves, and I can only ascribe this to some such reason as that lately given to me by the manager of a local bank in conversation, with reference to an error in numbers which had caused loss and inconvenience: it was to this effect, that so few errors occurred in their unrepeated messages that they did not think it worth their while to pay for repetition. The only remedy for this state of things is for the department, in justice to itself, to do what its customers decline doing, and to make it a rule, that in all cases of proper names, numbers, or words used in the abstract and without connexion, and where no aid is consequently afforded by the context to the detection of error, that repetition of such words be given by the department without charge. Some such rule is indispensable if the department is to be held responsible for refund of the cost of all messages in which errors are made. The Chamber allude, with reference to errors, to the "mistaken policy" of employing Natives and Eurasians. Without importing lads from England, Natives and Eurasians must be employed. The mass of our signallers are Eurasians, the sons of persons in humble circumstances; and doubtless many errors may be attributed to the limited education of these classes, from which alone, as a rule, the signalling branch of the department has hitherto been recruited. Assuming that there is no intention of importing lads from England, I believe that a larger introduction of native signallers would be an advantage. The recent experience of the Barrackpore Training School has shown that the natives who have presented themselves for admittance into the department possess, as a rule, a better knowledge of English than the class of Eurasians who usually seek employment in the telegraph. Although the pay of the former on the scale lately introduced is only half that of the latter class, it has been found sufficient to obtain for the Barrackpore School all the native probationers that were required.

5. I consider the chief cause of error to be the youth of the mass of the signalling portion of the department, a consequence of the rapid extension of the lines, and perhaps to carelessness resulting from dissatisfaction on the part of those employed, and consequent frequent resignations. I attribute this feeling to the late short-handed condition of the department, which led to excessive work, and also to the knowledge of the signallers that, under such circumstances, their services could not be dispensed with. This knowledge led to insubordination, and its natural result, dismissal. Another cause of error is doubtless that to which I have before alluded, viz., the defective education of the classes from which the signalling ranks are filled.

6. The number of lads that have been trained during the past season, by increasing the strength of the offices, has rendered it possible to dismiss insubordinate signallers; and as every signaller now dismissed is debarred, by departmental orders, from re-entering the department, there is now more hesitation in leaving than was formerly the case.

7. Something may, however, be attributed to the method of receiving messages by sound. Under circumstances otherwise similar, I am inclined to the opinion that receiving by sound admits of at least equal accuracy to that of receiving by sight; but in the former, if a signaller mistakes a word, or hesitates as to its meaning while thinking what word should be put down, several others immediately following, as well as the word on which the doubt arose, will escape his attention, and will be put down inaccurately rather than let the course of the message be interrupted; and this is especially the case when a junior and comparatively unskilled signaller is receiving from an impatient and smart senior. In receiving by sound it also frequently happens that the signaller, after receiving the first three or four letters, assumes the idea present in his mind as to what the word will be as correct, and neglects to notice any change in its termination; this is particularly the case with words ending in the plural number, and with such words as "battery," "repeated," "currency," which are liable to be changed into "battalion," "repealed," and "currently," and to any others with similar terminations. There was this great disadvantage in receiving by sight from the original Morse instrument, viz., that the signs were not coloured as in ordinary writing, but were merely embossed impressions on plain white paper, which were at no time very legible, and were frequently almost illegible, either from the light being bad, or from its not falling in the required direction, or from the difficulties which the adjustment of the apparatus necessary for the production of clear indentations offered to signallers; nevertheless, even under these disadvantages, the system of reading from the embossed tape does appear to have secured greater accuracy than receiving by ear, a result ascribable to the circumstance that under the former plan the receiver need not have the capacity of receiving as smartly as the transmitter that of sending, as the message, on being written down, could be read at leisure. The re-introduction of the system of reading by eye would, I consider, with the present instruments, be impracticable, as I feel convinced that the loud click of the apparatus would have the same effect on the signaller accustomed to receive by ear who attempted to copy from the tape, as that of a person speaking in the hearing of another writing. The introduction, however, of the new French instruments, the click of the armature of which is nearly inaudible, and by which the message is written down on paper in a black pigment, will, I have reason to hope, lead to greater accuracy than hitherto, and this the more so as our establishment is so very largely composed of recently admitted and half-trained lads, with whom correct receiving by ear is still a matter of difficulty. It must not, however, be supposed that by any system not purely and entirely mechanical, error can be entirely avoided. At each station at which the message has of necessity to be repeated, whether it be received by eye or ear, it must be written down in ordinary characters, on paper, and errors arise both in this writing down and in the reading of what is written by the signaller who has the duty of sending it on. A double line would materially contribute to reduce this class of error by permitting the exclusive use of one line for through messages only, thereby diminishing the number of repeating stations, and reducing the proportion of error from the causes just referred to.

Chap. IV. Electric Telegraph.

8. The Madras Chamber make two propositions:—

1st. "That the date and hour of despatch of a telegraphic message be included, if required, free of expense to the sender.

2d. "That in the case of messages delivered in an unintelligible shape, a refund be allowed even though the repeating charge may not have been paid."

9. The first proposition is already in force with regard to service messages, and I have for some time had a proposal in view to extend the arrangement to private messages by charging for every word in the address instead of only for certain words as at present, and giving the date free in every instance.

10. Regarding the second proposal, I consider that the present repetition charge is heavy, and that both it and the night charge might be reduced, the former to 50 per cent. and the latter to 25 per cent. upon the ordinary message, instead of 100 per cent. as they both are at present. If the Government desire, I will offer no objection to the proposal to give refunds for errors on unrepeated messages being experimentally introduced, limiting the refund to that portion of the message rendered unintelligible, and to cases in which it is clear that the portion has been rendered worthless by the error. This principle of partial refund on repetition messages has lately been introduced in consequence of its having been found that persons have not scrupled to claim refund for the whole value of a message in which a single word only had been erroneously transmitted. If the concession in the charge for repetition and night charge above suggested be approved, I think that the proposal to give refunds on other than repeated messages might, for the present, be held in abeyance.

11. The proposal of the Bombay Chamber has reference to the late frauds in that Presidency. As the recent cases are the first which are known to have occurred since the establishment of the telegraph in 1855, it does not appear to me desirable to appoint "a secret committee, under the guidance of an experienced officer trained in England," in view to bringing the real authors of these frauds to justice, more especially as they appear to be well known, and a want of evidence alone prevented their being brought to trial at the time of Pectall and Allen's conviction.

12. With reference to the concluding paragraph of your letter, the Bengal Chamber are of opinion that "telegraphic communication in India would be worked more satisfactorily and profitably to the Government and the public if it was entrusted to private enterprise." In no part of the world, with the exception of Englond and America, are the lines of telegraph in private hands; and I do not consider that a mixed ownership of the system of lines on the Continent of India would be at all satisfactory either to the proprietors or the public. There are already several lines of telegraph in private hands; I allude to those of the several railway companies, which have power to transmit private messages in all cases where the Government have no co-ordinate lines. Should, however, other private companies desire to undertake telegraph management, there is no line which could be so conveniently made over to them as that connecting Calcutta with Rangoon and the local lines in that province. These lines, connecting three very important places of commerce, Calcutta, Akyab, and Rangoon, with the advantages of possible extension to the Port of Moulmein, appear to hold out every prospect of being remunerative; and the fact of the telegraph lines in Pegu being very largely used in official correspondence, owing to the tardiness of postal communication, offers additional prospect of profit. Should the Government decide on such a transfer, I think it as well to mention that the offices are being weeded of unfit signallers and provided with the best instruments; and I have little doubt but that by the end of the year both establishments, instruments, and lines will be in good order, and the business of the lines ready for immediate transfer to a private company. I may add that a line on which I have been requested by the Bengal Government to report, viz., an extension of the Calcutta and South Eastern Railway Telegraph from the Port of the Mutlah to the mouth of that river, might also, if decided on, be advantageously transferred to a private company.

Of the lines and offices in India generally some (I may instance those hence to Bombay) are much more than self-supporting. There are others, however, which can expect no business except that derived from the Government. There are lines established for political objects only, such as that from Lahore to Peshawur. The value of the political services rendered by these lines may be considered by the Government as an equivalent for their cost, but no returns they are likely to yield at any early date would offer any encouragement to a private company to be connected with them.

I assume that the reasons which might incline the Government to make over a portion of the lines to a private company are, than such an arrangement would secure a more honest and economical administration than it is in the power of the Government to command. I do not believe there are any grounds for expecting either result. The English telegraphs are not free from the imputation of dishonest trafficking with the news committed to them for transmission, and the history of English railways and other joint-stock associations, both in England and other countries, I think proves that while business, if within the compass of a single individual, is, as a rule, much more economically conducted than it ever could be by Government, there is no reason for believing that where the extent of the business requires the resources of a company for its management, its administration would, in any respect, be more efficient or more economical than if under the management of the Government.

From *W. Grey*, Esq., Secretary to the Government of India, Home Department, to *H. W. J. Wood*, Esq., Secretary to the Bengal Chamber of Commerce; dated 15 January 1862.

I am directed to acknowledge the receipt of your letter dated the 14th of August last, replying to my communication No. 1168, dated the 12th June.

2. The Chamber was requested, in my letter of June, to favour the Government with their general opinion as to the efficiency of the Electric Telegraph for commercial purposes, and to furnish a Statement of the total number of messages sent or received, during a given period, by any firm or establishment connected with the Chamber, showing what proportion of them were delivered with reasonable punctuality and correctness, and in what proportion any delay or error occurred so material as to detract from the commercial value of this means of communication. It was intimated also that the Government would be glad to receive any suggestions the Chamber might have to offer for the improvement of the telegraph.

3. The Chamber, it is presumed, has been unable to furnish the Statement of Messages which the Government asked for, as no such Statement accompanied your letter, or has been received since.

4. The Committee of the Chamber, in reply to the request for their general opinion as to the efficiency of the Telegraph Department, state that they consider the Department deficient in despatch and accuracy, though they add they can only speak practically as regards the latter. In support of their view on that point, extracts from the opinions of several leading merchants of Calcutta are submitted with your letter.

5. The Committee observe that they believe the unsatisfactory working of the Department to be owing to "defective construction and bad organization," and they express an opinion that if the construction has been entrusted to persons conversant with the European system, and not to mere theorists, "the chief defects now evident would have been avoided." The defects of construction here alluded to are not specified in your letter. It is urged, however, and perhaps this is meant as an instance of defective construction, that neither correctness nor despatch can be expected when the means of transmission are limited to a single wire.

6. With regard to the organization of the Department, the Committee comment on "the mistaken policy on the part of the authorities, who, for economical reasons, have thought proper to employ, on low salaries, as signallers and copyists, persons chiefly Natives and Eurasians, whose want of education and proper training render them unfit forthe appointments which they hold." The Committee add that they have also been informed that the inspectors are not sufficiently numerous to keep up an efficient supervision of the lines.

7. Lastly, the Committee state their opinion that "Telegraphic communication in India would be worked more satisfactorily and profitably to the Government and the public if it were entrusted to private enterprise, for which capital could readily be found in England.

8. Your letter and its enclosure, as well as the replies received from the Madras and Bombay Chambers of Commerce to a similar communication addressed to them by Government on the same date as that above mentioned to the Bengal Chamber of Commerce, have been communicated to the Director General of Telegraphs; and that officer has furnished a Report on the subject, a copy of which, and of the replies received from the Chambers of Commerce at Madras and Bombay, I am directed to transmit for the information of the Chamber, and at the same time to communicate the conclusions of the Governor General in Council on the several points discussed in the correspondence.

9. It has for some time been in contemplation to put up a second wire on the line between Calcutta and Bombay; but the Governor General in Council is quite prepared to sanction the construction of an independent telegraph on that line (which, of all others, presents the most likely prospect of a remunerative business) by a private company if any persons are willing to undertake it. Six months, it is presumed, is sufficient time to allow for the formation of such a company; and if within that time measures are seriously taken for effecting the object in view by private enterprise, the Government will abstain from putting up a second wire, and will promise not to compete with any private line in that direction by reducing below the present rates—or below the rates adopted by the company if they should be lower than the present rates,—the charge made on messages between Calcutta and Bombay, or between any two places at which offices connected with the private line may be established.

10. It must be understood, however, that the license to be granted for the erection of a private line of telegraph between Calcutta and Bombay would include a condition enabling the Government, whenever necessary, to claim priority of transmission for all public messages at the same rate of payment as that charged to the public generally. Subject to this condition, there would be no objection made by the Government to the construction of private lines of telegraph in any direction from one part of India to another.

11. The Governor General in Council is not prepared to make over to any private company or individual any Government line of telegraph already existing or projected, because he thinks it of the greatest importance that at least one medium of telegraphic communication between all the most important places in India should be in the hands of

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the Government, and entirely under the control of its own officers. His Excellency in Council thinks too, adverting to the suggestion made by Colonel Douglas in the 11th paragraph of his letter, that it would be inconvenient to make over either the Hooghly or the Mutlah River lines to a private company, as these lines are chiefly occupied with messages relating to the business of the port. Should it be thought, however, that, exclusive of this business, there is sufficient correspondence to occupy a second line, there will of course be no objection to the construction of such a line by a private company.

12. With regard to the employment of a different class of signallers on the Government lines, and especially with regard to the substitution of European for Eurasian and Native agency, I am directed to call the attention of the Chamber to the remarks made by the Director General in paragraphs 3 to 6 of his letter, and to observe that, while it is impossible, without reckless extravagance and an entire disregard for the fair claims of all classes to public employment for which they are qualified, to substitute Europeans for Eurasians and Natives as signallers in all parts of the country, it is also certain that, for the mere business of signalling, Natives of India are as apt as any other class, and that under proper supervision they perform the duty as well as Europeans. For the higher situations in the Department it has been, and will continue to be, the object of the Government to avail itself of European agency as far as possible, and the Director General will be authorized to employ trained European signallers in the principal offices where the extent and nature of the business require the presence of men of higher education, and possessing other qualities in which, generally speaking, the natives of India are found to be deficient. Natives are largely employed as signallers on the railway telegraph, and it is certain that no private company could hope to make a line of electric telegraph in India profitable as a commercial enterprise if it were to employ European signallers exclusively, or even to any great extent.

13. The training of signallers in India, so as to secure a constant supply of qualified persons, is an object which has engaged the careful attention both of Colonel Douglas and his predecessor, and it is one of which the importance, I am instructed to state, will not at any time be lost sight of. It may be confidently expected that as the supply of qualified Native probationers becomes fully equal to the great and increasing demand for their services, a result which the present rates of pay and prospects of promotion seem likely soon to accomplish, instances of inaccuracy and want of despatch, so far as they are attributable to defective agency, though impossible, under any circumstances, entirely to prevent, will be reduced to a minimum.

14. The Chamber will observe, from the 3d paragraph of Colonel Douglas's Report, that the absence of insulation of the wires is referred to as one of the difficulties to be contended with in India in the correct transmission of messages. The question of insulation, I am directed to state, will be brought to a practical test as soon as the new insulators, now expected from England, arrive.

15. The Governor General in Council is desirous that it should be brought prominently to the notice of the Chamber, that it is almost exclusively in the case of unrepeated messages that any cause of complaint arises, and that where repetition is resorted to, mistakes do not occur. His Excellency in Council has now resolved, in accordance with the suggestion made by the Madras Chamber of Commerce, to allow refunds on unrepeated messages on the same conditions as those on which refunds are given in the case of repeated messages, with the further proviso that no refund will be given for any error in an unrepeated message arising from wrong figures being given, unless the precaution advised in the 16th No. [*] of the Telegraph Rules shall have been adopted.

16. With reference to the suggestion contained in the 9th paragraph of the Director General's letter, that the repetition charge should be reduced from 100 per cent. to 50 per cent. extra, I am to observe that this reduction has been already carried out, repetition being now charged for at half-price only, or 50 per cent. extra. The Governor General in Council sees no sufficient reason for reducing the night charge, which is also suggested by Colonel Douglas in paragraph 9 of his Report, this charge being made on a wholly different principle from that on which the repetition charge rests.

17. In modification of the proposal made by the Madras Chamber of Commerce, the date and hour of despatch *from the Telegraph Office* will in future be inserted on every message, free of expense to the sender, without any alteration in the present mode of charging for the address. The senders may still continue to date their messages if they please, but the sender's date, if inserted, will be charged for as at present.

18. On the whole, the Governor General in Council thinks it must be admitted by the Chamber that, considering the disadvantages under which the Indian Telegraph labours, especially the difficulty of obtaining a sufficient and constant supply of properly-trained and qualified signallers, and the system of non-insulation[†] which has been bequeathed to it under a belief that insulation in India was practically unattainable, its general efficiency, as the Madras Chamber of Commerce observes, is favourable. Out of 240,451 messages conveyed in 1860-61 only one hundred and thirty-nine (139) were complained

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[*] The errors which chiefly occur are in the numerals, such as *sixteen sixty*, *thirteen thirty*, owing to the sound and first three or four letters being similar. To obviate this it is recommended that in all financial or money messages the sum be given in two forms, halving or doubling the amount, thus; "Pay to my order 500 rupees or half 1,000." When this is done, an error is of very rare occurrence.

[†] The annexed extract of a letter from Colonel Douglas, regarding the difficulty experienced on uninsulated lines in wet weather, has been subsequently communicated to the Chamber of Commerce.

of as erroneous, a proportion which is ·0575 per cent., or little more than ½ per 1,000; while of the commercial messages delivered in Bombay during April and May last 92 per cent. were received with reasonable punctuality and correctness, 5½ per cent. with important errors or delays, and only 2½ per cent. so delayed or mutilated as to be useless. And the Statement furnished from Madras of commercial messages received at and despatched from that place during August last, is, it will be seen, even more favourable. The Governor General in Council by no means concludes that 139 represents the real number of messages in which mistakes occurred in 1860-61; but seeing that the rules of the Department allow of refunds for repeated messages delivered in an unintelligible state, and for all messages in case of non-delivery or unjustifiable delay, it can hardly be denied that the proportion of complaints to the number of messages despatched does afford some criterion of the general efficiency of the Department. The Statements regarding the commercial messages delivered in Bombay during April and May, and those received at and despatched from Madras during August, I am to observe, are derived from the Returns which the Bombay and Madras Chambers of Commerce have been good enough to furnish in compliance with the request contained in my circular letter of the 12th of June last, and the testimony which they afford, therefore, to the fair efficiency of the Department cannot be doubted.

19. It is, however, freely and fully admitted by his Excellency in Council, that there is great room for improvement, and that instances of messages delayed, misdelivered, and inaccurately or unintelligibly rendered are of much more frequent occurrence than they ought to be. The establishment has been recently reorganized and placed on a better footing as regards pay and promotion;* and the Government relies upon Colonel Douglas and the higher officers of the Department, to use the utmost care and vigilance in preventing mistakes, to investigate thoroughly every complaint, to visit every instance of proved neglect with suitable punishment, and to endeavour unremittingly to make the telegraph thoroughly efficient, by promptly remedying such defects as can be corrected with the means at their disposal, and by suggesting to Government all other practicable measures required for the purpose.

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* Financial Resolution, dated 10th December 1861.

Extract from a Letter from Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India; dated the 3d December 1861.

I would wish to say a word here on the subject of imperfect communication and its causes. By imperfect communication is meant that, owing either to the absence of insulation, or defective insulation, or to unfavourable weather, or, in the case of lines well insulated, to deposits of moisture on the insulating surfaces, resulting from an excessively damp state of the atmosphere, a loss of the electric current occurs, and it is found impossible to send to the distant station a current of strength sufficient to affect the receiving instruments there with that certainty necessary for uninterrupted correspondence. In such cases some of the dots and bars composing our letters, as it were, drop out, and the word of which they form a part is rendered unintelligible; or it may occur that from the same cause a letter becomes split up into two, producing similar confusion.

From the above it will be seen that imperfect communication is not limited to uninsulated lines; it may occur, under certain circumstances of weather, with those lines that are provided with even the best-known means of insulation. In densely populated countries, where the distances between telegraph offices are short, this difficulty is overcome by employing large battery power; but over the enormous spans of the lines in India it is practically and theoretically demonstrable that no amount of battery power would be sufficient, under the circumstances I have mentioned, to force a current sufficiently strong for effectively working any instruments hitherto practically employed for telegraph purposes.

The following Extracts from "Prescott's Theory and Practice of the Electric Telegraph," published in America in 1860, will illustrate the facts I have just stated:—

Extract No. 1.—"Upon a long telegraphic circuit there is a constant tendency for the current upon the line to pass off into the earth; this passage of the current into the earth we call 'Escape.' There are no lines in the world, probably, certainly none in the United States, whose insulation is so perfect as not to be more or less affected by this escape. It is much greater during wet weather; but all lines are more or less affected at all times."

Extract No. 2.—"During very wet weather, however, unless the line be very well insulated, a great portion of the current escapes; and it sometimes happens that a battery of 50 cups of Grove can scarcely affect the armature of a sensitive electro-magnet at a distance of even 100 miles, the remainder of the current escaping, a little at each pole, during this entire length of line."

Extract No. 3.—"It does not matter how perfect our apparatus is in other respects; if the insulation is defective, it is a constant source of annoyance, and causes, oftentimes, great loss of business. Much can be done by increasing the power of the batteries, and by distributing them along the line; still the disagreeable fact ought not to be withheld, that in rainy or foggy weather not one of our telegraph lines in this country is reliable, or, if they work at all, it is only from one short station to another, and that with much difficulty. But this is also the case in England, France, Germany, in a word, in every country where the electric telegraph has been introduced."

Extract No. 4.—"Our principal lines work very well during dry weather, when in fact scarcely any insulation beyond the dry poles is needed; but let a shower even come up, and all the wires are seriously affected by escape.

"It is not an unfrequent occurrence, during the rainy season, for all communication between the important cities of New York and Boston by the wires to be suspended, notwithstanding there are no less than eight direct lines extending between the two places."

The above extracts will, I doubt not, be considered as authorising the expectation that imperfect communication during severe rainy weather will be considered a sufficient explanation of the bad working of our uninsulated Indian lines, which has been so frequently a cause of complaint during the past rainy season.

Appendix C.

Extract from the Proceedings of the Government of *India*, in the Financial Department, No. 14,667; dated 13 December 1861.

Extract from a Letter from the Officiating Director General of Telegraphs in India, No. 931; dated 20 July 1861.

I forward the annexed letters in original, being three separate references arising from the difficulty of obtaining medical aid for persons employed in this Department, and regarding which I have the honour to solicit the orders of Government—

1. The Telegraph Office at Agra being within the cantonments at that station, it appears from Mr. Walton's No. 4017, that the civil surgeon does not consider it his duty to attend; and on the ground that it becomes necessary for the garrison surgeon to render any medical aid that may be necessary, it is recommended by Dr. Murray, the Inspector General of Hospitals, Agra Division, that an allowance of 30 rupees per mensem should be sanctioned to provide for conveyance. I am aware of no precedent of this nature.

From the Principal Inspector General, Medical Department, to *A. M. Monteath*, Esq., Under Secretary to Government of India, Home Department, No. 810; dated 24 September 1861.

In reply to your letter No. 1435, of the 27th July last, I beg respectfully to state, for the information of his Excellency the Right Honourable the Governor General in Council, that a civil officer living within cantonment boundaries, unless obliged to do so from the absolute want of a house in the civil station, cannot compel medical attendance upon him there by the civil surgeon, nor can he insist upon receiving professional aid permanently from the military officer in charge of the staff medical duties.

2. As regards the men of the Electric Telegraph Department, however, no rule has yet been passed; but it appears to me that where their duty requires them to reside in the military cantonment, they should receive medical aid from the surgeon or assistant-surgeon in charge of the staff; while, if they are located in the civil lines, they ought, in like manner, to have a right to the services of the civil surgeon. When, however, they can at all afford it, they might be expected, like other persons similarly circumstanced, to pay the doctor something for any attendance on their families.

3. In the particular case of Agra, I am of opinion that the telegraph *employés* ought to receive medical assistance from the garrison surgeon of that place, and that there and at other principal telegraph stations where the Christian and other subordinates are in considerable numbers, the medical officer, civil or military, might fairly be granted a conveyance allowance of 30 rupees a month.

Financial Department, No. 13,752, Fort William, 22 November 1861.

Forwarded to the Officiating Civil Paymaster, Fort William, for report, with reference to Articles 22 and 33 of Chapter V. of the Bengal Medical Code, and to the general practice observed in the Civil Department.

Civil Paymaster's Office, Fort William, 29 November 1861.

Memorandum.

Rule XXXIII. of the Medical Code provides that if a civil officer resides from necessity in a military cantonment, he is entitled to medical aid from the civil surgeon. It is submitted that telegraph officers come under that category. Civil surgeons are not entitled to travelling allowances for visiting outposts of a less distance than five miles.

Financial Department, Fort William, 13 December 1961.

Resolution.

The Governor General in Council observes that, under Rule XXXIII. of the Medical Code, civil surgeons are bound to attend all telegraph officers in the civil station, and all civil servants who of *necessity* reside in military cantonments in consequence of there being no suitable residence in the civil station. But those who reside in the cantonments merely from *choice* cannot demand the services of either the civil or the military surgeon, and must make their own arrangements.

With respect to the proposal of the Principal Inspector General of the Medical Department, that an allowance of 30 rupees per month be made to the medical officers, civil or military, at all the principal telegraph stations where the telegraph subordinates are in considerable numbers, his Excellency in Council observes that civil surgeons are not entitled to travelling allowances for visiting outposts of a less distance than five miles.

(signed) *C. H. Lushington*,
Secretary to the Government of India.

Appendix D.

From *A. M. Monteath*, Esq., Under Secretary to the Government of India, Home Department, to Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, No. 2154; dated 30 November 1861.

Referring to the correspondence noted in the margin, I am directed to transmit for your information the accompanying copy of a Memorandum by Sir William O'Shaughnessy, on the subject of the reorganization of the establishment of the Electric Telegraph Department.

To Officiating Director General of Telegraphs, No. 329; dated 29 April 1861.

From Officiating Director General of Telegraphs, No 410; dated 5 June 1861.

Memorandum by Sir *William O'Shaughnessy*.

With reference to the Despatch from the Government of India, dated 14th June, I have to observe, in the first place, that it is most unjust and unreasonable on the part of the Bombay complainants to impute corruption to the Telegraph Department *generally* on the facts they adduce. The wires were cut and instruments introduced for the fabrication and falsification of messages by persons previously dismissed from the Department, bribed by other parties. It is almost impossible to prevent the occurrence of such crimes. One might as fairly blame the Bank of England or the Mint for the issue of forged notes and spurious coin. While the Telegraph Department embraces all India, Pegu, the Punjab, Scinde, and Ceylon, it is *only in the Bombay Circle* that these occurrences have taken place; and this, beyond all doubt, proceeds from the demoralization caused there by the opium gambling itself.

As the Chamber of Commerce of Bombay were pleased to certify last year, on my leaving India, that they were satisfied with my administration of the Department, I cannot regard the present complaint as in any degree reflecting on myself. On the assertion that "military officers are unfit by their previous training for the direction of the Department," and that "*men of business*" should be appointed, to observe that I never met a better "business man" than my late lamented assistant * * *; and the most useless and inefficient persons in our establishment have been "office men" of previous mercantile or civil training, such as Mr. * * *, Mr. * * *, and Mr. * * *.

The real objections to the employment of military officers in the Telegraph Department, are their liability to be called away to military duties at critical times, and their being independent of the Department itself if they become discontented with their pay or position, or find their duties onerous. The temporary employment of Major Stewart on the fortifications of Benares threw the whole Department into confusion for several months.

I shall return presently to the subject of the persons who should be employed. I must now observe that, while the general imputations conveyed in the complaint are most unjust, I am still of opinion that the Telegraph Department is open to some blame on other grounds. The abolition of the Local Examiners' Offices for the scrutiny of messages in Bombay and Madras; the depriving the superintendents of these circles of all power over their subordinates, and prohibiting these officers themselves from the examination of messages transmitted by or through their offices; the removal of line guards and mounted patrols from many of the lines; the want of due preparation for the present monsoon, and the consequent occurrence of the most unprecedented delays of all messages between Calcutta and Bombay since the end of last May—all these are matters for which the present administration of the Department is answerable.

Reverting to the establishment, I fully agree with the Bombay Government as to the absolute necessity for the employment of "well-paid and respectable men" in every Telegraph Office. I have pressed this view for years and laboured hard to carry it into practical application. Of the 80 young gentlemen sent from England by my advice in 1856–57, the greater number have been appointed to the charge of offices, and these are as well and as honourably managed as any offices in the world. I may add too, that, in attempting to improve the state of the Bombay stations by placing these in the hands of *English gentlemen*, I, in 1858, encountered fierce opposition from the Bombay Press, which teemed with abuse of my proceedings for appointing men of education and integrity in supersession of incompetent Eurasians and others who were dismissed for gross misconduct.

To carry out the views expressed by the Bombay Government, and so long contended for by myself, I am strongly of opinion that we should send out at least 50 more English assistants, thoroughly trained to the use of French writing instruments, and on the same footing as the Morse assistants who went to India in 1856–57.

The introduction of the French writing instruments (now being provided) will afford invaluable aid in the prevention and detection of falsifications and in the conviction of the persons guilty.

The rapid introduction of the iron posts and new insulators will put an end to the intolerable delays now caused by interruptions, and will justify the Department in reducing line patrol establishments prematurely and injudiciously discharged early this year.

There are grave objections to the mode of charging for cypher groups of five figures advised by the Bombay Government. I have in a previous Report shown that, owing to the prevalence of natural electric currents all over the Indian lines, the dots and dashes by which figures are represented, or their values altered, are incessantly made by accidental atmospheric currents, and that all figures must be telegraphed in words spelt in full.* We should thus be called upon to signal five words for the price of one, while our tariff is already by far the cheapest in the world. Any merchant, speculator, or gambler can very easily construct a simple but impenetrable code of *phrases* and *sentences* for himself, by which he can use our lines at absolutely insignificant cost.

The necessity of a further legal enactment inflicting the penalty of transportation for the falsification and fabrication of messages has been pointed out by Lieutenant Colonel Douglas, with whose opinion on this point I fully agree.

I would further advise strongly that the Local Examiners' Offices at Bombay and Madras may be forthwith re-established; that the power of control formerly possessed by the superintendents of these divisions be restored; and that the most active, vigilant, and strict officers of the whole Department be employed in the Bombay Circle, where, I am of opinion, there has been much apathy on the part of the gentlemen now in charge.

The cash receipts of the Department for private messages only had, in May last, attained the rate of 60,000 *l.* per annum; the cash received for Government messages, 20,000 *l.* per annum. Every month receipts exhibit a steady increase. If iron posts and the new insulators be supplied for the whole of India, as urged by the Government of India and myself, full-trained gentlemen be sent out from England as now advised, and if other measures above specified be carried into effect, the revenue of the Department would most assuredly increase so rapidly that, in two years from this time, a considerable yearly profit will be realized, while the establishment will *pari passu* improve from day to day, and prove of inestimable value to all classes of the community.

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* "A single dot, more or less, converts any figure into that next before or after it in the scale. Now in every thunderstorm, and even in storms hundreds of miles distant; the instruments are every now and then acting of themselves, and frequently for several minutes making dots and dashes and actual figures, so that it is only by the context of words and letters that the work of the signaller can be distinguished from the effects of electrical disturbances in the air."

Liverpool, 15 August 1861. (signed) *W. B. O'Shaughnessy.*

From Lieutenant Colonel *C. Douglas,* Officiating Director General of Telegraphs in India, to *A. M. Monteath,* Esq., Under Secretary to the Government of India; No. 2316, dated 12 December 1861.

Replying to your No. 2154 of the 30th ultimo, forwarding copy of a Memorandum by Sir W. O'Shaughnessy, which appears to be a reply to the remarks of the Bombay Chamber on the occasion of the late frauds in that Presidency,—

2. Sir W. O'Shaughnessy considers that the Department is open to some blame in consequence of certain changes in its administration introduced by me during the past fifteen months. I will briefly remark on these changes in the order they occur in his Memorandum:—

1st.—The abolition of the Local Examiners' Offices for the scrutiny of messages in Bombay and Madras.

1. The Local Examiners' Offices, not only in Bombay and Madras, but in every circle in the Department where they existed, were abolished on the 30th September 1861.

I considered that these offices were superfluous as a means of affording data to reply to complaints regarding delay or non-delivery of messages for the following reasons:—

1. Because the information already existed in a much more perfect form in the Central Complaint Office established in Calcutta by Sir William O'Shaughnessy in January of the same year; and 2d, because a complaint made by any person to the head-quarters of the circle in which the message was tendered for transmission would probably have to be referred to two or three other circles before any satisfactory reply could be received. For instance, under the old arrangement, supposing a message sent from Calcutta to Bombay had been erroneously delivered, and it happened, as is frequently the case, that the message reached the Bombay Office correct, but that an error had been made by the copying clerk in making the fair copy for the addressee, the sender would complain to the deputy superintendent, Bengal, who, after tracing the message through his circle, would either state in reply that the message passed correctly through the offices in his charge, and would refer the complainant to the next circle, Indore, where the same course would be repeated by Indore referring the sender to Bombay; or else he would make the necessary inquiry himself from circle to circle until the place where the error occurred had been traced,—thus throwing a considerable amount of labour and trouble on deputy superintendents, which the Central Complaint Office has the means of entirely avoiding and of affording the sender a satisfactory reply without further reference to other offices.

As a means of detecting errors, by deputy superintendents, regarding which complaint had not been made, I consider these Local Examiners' Offices a farce. I can speak from experience of that in the Bengal Circle at the time I directed its abolition. The examiners were, I think, three months in arrears, and I have reason to believe that little or no attention was paid to the results of the examination, and certainly none of a satisfactory character.

I am at a loss to understand Sir William O'Shaughnessy's objections to the closing of these Local Examiners' Offices; for it appears, from his Annual Report for 1857-58, that he entertained similar opinions to myself of their uselessness, and he appears, at that time, to have abolished them, although it is not shown how they came to be reinstated. In page 28 of that Report he writes as follows:—

"108. On my return in December last year I found all this changed. The accounts were in almost inextricable confusion and arrears; the offices in the Bombay and Madras Circles, and to a great extent in the North Western Provinces, were almost in utter disorganization;—night alarms were never attended to; a new system of the examination of messages had been introduced, viz., leaving this in the hands of deputy superintendents of each circle, instead of the head office; the deputy superintendents sent in a weekly tabular statement professing to show the total number of messages, their number of words, exact number of errors, this, with great apparent precision, to the fifth decimal place: what degree of reliance was to be placed on such reports may be judged by the fact that, soon after my arrival at Bombay, I took sudden possession of the Examiners' Records, and found that for more than six months the Returns had been a mere sham, the detailed Reports had seldom or never been read, and several hundreds were found still in the unopened envelopes.

"I have accordingly directed the former system to be resorted to, and, after much passive and open resistance on the part of some office assistants, I have nearly brought matters into a good working state again."

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A return to the old system of Local Examiners' Offices would not only be a source of a large monthly increase to departmental expenditure, but would entail postage on some 240,000 sheets of paper annually in copies of messages alone, exclusive of envelopes, as also doubtless a large increase of correspondence, besides an immense amount of labour on our already hard-worked signallers; for it would then be necessary to make a copy of every message that passed through a Signal Office to supply the materials for the Local Examiners' Offices. Assuming that the present system has its evils, which I do not admit, I would, even if such were proved to be the case, rather let such remain than incur the much greater evils which would be entailed by a re-introduction of the Local Examiners' Offices, and the necessarily attendant increased work in every Signal Office throughout India.

2nd.—The depriving the Superintendents of these Circles of all power over their subordinates.

2nd.—I annex copy of every circular, six in number, issued by me up to the present date in any way limiting the powers previously possessed either by superintendents or deputy superintendents prior to my incumbency. They are as follows:—

I. Circular No. 12, limiting a power which lead to constant and reckless removals and changes of assistants, signallers, and others, and which was a fruitful source of the discontent so prevalent in the Department, entailing also much expense.

II. Circular No. 20, controlling expenditure which has been necessary in every Department.

III. Circular No. 52, abolishing the Local Examiners' Offices under the deputy superintendents.

IV. Circular No. 75, prohibiting the reading of messages by superintendents and deputy superintendents.

V. Circular No. 81, removing the power of fining by deputy superintendents for errors made in the transmission of messages.

VI. Circular No. 119, limiting the hitherto uncontrolled power which, it appears, all persons in the Department exercised, of inflicting fines on those under them; considering that in all cases where a heavier punishment in excess of the limit is necessary, it is proper that the character of the person should be brought directly under the view of the head of the Department, as it is generally better that he should be removed from the Department than punished by any excessive fine.

3rd.—And prohibiting these Officers themselves from the examination of messages transmitted by or through their Offices.

3rd.—Copy of my order on this subject, Circular No. 75, is annexed. It has been reported that, in the correspondence connected with Mr. * * * * *'s case, he was in the habit of taking the messages into his private room for perusal, and the same was done to my own knowledge by the deputy superintendent of the * * * * Circle. The superintendents of divisions and the deputy superintendents of circles have ample means of knowing the working of their circles by the daily reports from their offices, &c., without reading the service and private messages that pass along the line. In fact, they could have gained no information whatever from any such examination beyond learning the contents of messages, as it is but very recently that the practice of giving the dates when messages left the despatching station was introduced by myself; therefore it would have been impossible for them to know how long a message had been on the line, and, supposing errors had been discovered in such messages, it would have been equally impossible for them to know whether such occurred in their own or in any other circle, unless through the agency of the Local Examiners' Offices, which, as I have already pointed out, were a useless burthen to the Department since the establishment of the Central Examiners' Office in Calcutta.

4th.—The removal of Line Guards and Mounted Patrols from many of the lines.

4th.—On this point I have already informed Government, in my No. 1263 of the 20th August, that my opinion of the uselessness of these men was confirmed by every deputy superintendent in the Department whose opinion was worth having, and the results have fully borne out my anticipations. The East Coast, Central India, and the Dacca Circles were those in which the system of line guards had by far its greatest development, and these three were those in which communication was most frequently interrupted. Since the beginning of the year the line guards in the East Coast Circle have been entirely removed, and from the same period the working of that circle has been an example of excellence to the whole Department. In July the majority of the line-guards have also been removed from the Dacca Circle, and since then the working of that circle has progressively improved. The Central India Circle has alone retained its original complement of line-guards, and in that circle alone has the working remained unimproved. I attribute the improvements in the working of the East Coast and Dacca Circles mainly to the changes in the deputy superintendents, and I merely mention these facts in proof of how absolutely indifferent the presence or absence of line-guards is to the good or bad working of the lines.

5th.—The want of due preparation for the present monsoon, and the consequent occurrence of the most unprecedented delays of all messages between Calcutta and Bombay since the end of last May.

5th.—The delays in the transmission of messages during the past season were in no way consequent on any want of preparation for the monsoon, but were caused partly by the loss of cables, from the unusually heavy floods, but chiefly from the absence of the insulation on lines; and delays proportionate to the amount of rain will occur every season until a good system of insulation has been introduced.

6th.—I am strongly of opinion that we should send out at least 50 more English assistants thoroughly trained to the use of the French writing instruments and on the same footing as the Morse assistants, who went to India in 1856-57.

6th.—The introduction of more English hands would doubtless be very desirable; and, if the Government should decide on adopting this suggestion, I would strongly recommend that no assistant should be permitted to join the Department until he had passed an examination, both in the theory and practice of telegraphy, in accordance with a fixed test, and that examination should be conducted by some person of acknowledged ability as an electrician who has not been personally concerned in the training of the candidates.

From *W. Grey*, Esq., Secretary to the Government of India, to Lieutenant Colone *C. Douglas*, Director General of Telegraphs in India, No. 893; dated 15 February 1862.

YOUR letter No. 2316, dated the 12th December, written with reference to the memorandum by Sir William O'Shaughnessy to the Secretary of State, on the subject of the organisation and management of the Electric Telegraph Department, having been laid before the Governor General in Council, I am directed to state that his Excellency in Council considers that you have satisfactorily answered the several objections made by Sir William O'Shaughnessy to the present management of the Department.

2. The Governor General in Council does not doubt that it would be very inexpedient to revert to the system of local examination of messages either in lieu of or in addition to the present Central Complaint Office; or to give to the local superintendents more power over their subordinates than they now possess; or to permit those officers habitually to examine messages; or to restore the line guards and patrols, whose services have been dispensed with.

3. His Excellency in Council believes that the recently sanctioned re-organization of the Department will tend more than anything to make the service efficient, by raising its character, and holding out adequate rewards in the way of pay and promotion to all employed in it; that if in addition to this a proper system of insulation can be attained, there will be little left to be desired.

4. The charge made by Sir William O'Shaughnessy against the Telegraph Department, of not being prepared for the late monsoon, is not, in the opinion of the Governor General in Council, borne out. The interruptions which occurred were attributable to accidents which could not have been prevented, and to the inherent defect of non-insulation.

5. His Excellency in Council concurs generally in the view expressed in your 6th paragraph, as to the advisability of obtaining more assistants from England, but he considers it undesirable that 50 should be sent out at once, as would seem to be contemplated by Sir William O'Shaughnessy. It should be determined, in the first instance, how many English assistants are required, both for employment at the principal offices as signallers, and for filling up vacancies in the higher ranks of the service; and when this number shall have been gradually reached, a fixed number should then be sent every year, so as to keep up the establishment uniformly at its proper strength. I am directed to request that you will submit a definite proposal based on this plan. The proposal should include provision for the due examination of assistants in England, under the orders of the Secretary of State before they are sent out, the object being to have at all times a few European trained signallers for the chief offices, being young men fitted, both by general education and by knowledge of the business of telegraphy, and by acquaintance with the most recent improvements therein, to fill, in course of time, the higher offices of the Department.

EXTRACT from DESPATCH No. 9, dated London, 17th June 1862, from the Right Hon. the Secretary of State for India, to His Excellency the Right Hon. the Governor General of India in Council.

"Para. 2.—You have been informed, by my letter No. 6 of the 31st March last, of my general approval of the changes in the establishment of the Telegraph Department, as reported in your No. 1, dated the 15th January. Your further letter on the same subject, No. 4 of the 18th February, therefore, calls for no remark.

"Para. 3.—Colonel Douglas has, I think, shewn that there was no omission on his part to make due preparation for the last monsoon. He has also shown good reason for the changes which he has introduced in the working of the Department."

APPENDIX (E).

CHAP. IV.
Electric Telegraph.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to *R. H. Davies*, Esq., Secretary to the Government of Punjaub, No. 1324; dated 27 August 1861.

I HAVE the honour to request that, should his Honour the Lieutenant Governor see no objection, orders may be issued to the police of the districts under his Government to give immediate intimation, at the nearest telegraph office, of the nature and position of any accidents to the telegraph lines which they may observe. The arrangement would be one of great convenience to this Department, as well as of much advantage to the Government and the public, in shortening the duration of interruptions.

From *R. H. Davies*, Esq., Secretary to the Government of Punjaub, to the Director General of Telegraphs in India, No. 450; dated Muree, 7 September 1861.

IN reply to your No. 1324 of the 27th ultimo, I am directed to inform you that the Inspector General of Police has been requested to issue the necessary orders for information of accidents to telegraph lines being given to the nearest telegraph office.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to *W. Grey*, Esq., Secretary to the Government of India, No. 1864; dated 29 October 1861.

I HAVE the honour to submit copy of a letter addressed to the Secretary to his Honour the Lieutenant Governor of Punjaub, suggesting that it should be made a part of the duty of the Punjaub police to report to the nearest telegraph office accidents to the telegraph lines. His Honour's reply, and a copy of the order issued on the subject, is also enclosed.

2. It appears very desirable that similar orders should be issued to the police throughout India, and in this view I submit the proposal for the consideration of Government, and for the issue of the necessary orders to the Local Governments, should there be no objection to the arrangement.

CIRCULAR No. 80 of 1861.

From Major *G. Hutchinson*, Inspector General of Police, Punjaub, to all Deputy Inspectors General; dated Lahore, 12 September 1861.

Injury to telegraph line to be reported.

REQUESTS he will order the police to give immediate intimation at the nearest telegraph office of the nature and position of any accident to the telegraph lines which they may observe.

2. In the Station Diary the report of the road patrol must always note, "Telegraph line observed: '*All right*,' or the contrary, as it may be."

From *J. H. Rivett Carnac*, Esq., Officiating Under Secretary to the Government of India, Home Department.

To the Secretary to the Government of Bengal - - -
Ditto - - - - - Fort St. George -
Ditto - - - - - Bombay - -
Ditto - - - - - N. W. Provinces -
The Chief Commissioner of - - Oude - - -
The Commissioner of - - - Pegu - - -
Ditto - - - - - T. and M. Provinces
Ditto - - - - - Nagpore - -

Dated 5 November 1861.

I AM directed to forward for the accompanying copy of a Circular, issued under the orders of the Government of the Punjaub by the Inspector General of Police in that province, directing the police to give intimation at the nearest telegraph office of the nature and position of any accident to the telegraph lines, and to request that, with , an order to the same effect may be issued to the police of

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(No. 3375.)

Chap. IV. Electric Telegraph.

Copy forwarded to the Officiating Director General of Telegraphs in India for information with reference to his letter No. 1864, dated the 29th ultimo.

(signed) *J. H. Rivett Carnac*,
Officiating Under Secretary to the Government of India.

Appendix (G).

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to *A. M. Monteath*, Esq., Under Secretary to the Government of India, Home Department, No. 3497; dated 10 April 1862.

Replying to your No. 1651 of the 31st March last, on the subject of certain proposed changes in the rules of this Department.

2. Your letter remarks that, in the case of "Public messages, the date of despatch by the officer who sends it, as well as the time of its despatch from the Telegraph Office, should be recorded on the face of the message."

3. The term date in strictness includes every information necessary for fixing the time of an event, and, applied to messages, should include the year, month, day, hour, and minute of despatch; the year, month and day are very generally given by the public officers, though some give the day only, which appears to be a sufficient dating in the case of telegrams. The date given by this Department excludes the year and month, but gives the day, hour and minute, the latter two being introduced for departmental purposes solely; and I see no advantage in burdening the line, by giving more than the above, or by adding thereto a sender's date.

4. Your letter further says the proposed modifications of No. XI. run thus: "The date and hour when a message is received, &c., ought it not to be the time when a message is despatched from a Telegraph Office?" To this I answer that what concerns the receiver as respects this Department is the time his message has been in its hands. In cases of delay it is immaterial to him whether the delay has occurred from detention in an office by the sender and that of signalling, or has arisen subsequently during the transit of the message along the lines. In either case all he cares to know is when the message was entrusted to the Department for despatch. This information is given in the present office date, and being given it is unnecessary to give more.

5. These office dates are the only check against delay; and were, instead of the date of delivery by the sender, that of signalling given, this Department would have no direct check against detentions in the Despatching Office itself.

6. Further important considerations might turn on the date shown in the message. Suppose it to be a report of departure, say by train, the message being, "Mr. Smith left by train a few minutes ago," &c., &c. Suppose the date of signalling were given, and the message by neglect or press of work had been detained some hours, it might then convey information very different from that expected and desired by the sender.

Within two months from the date of despatch.

7. Your letter continues, with reference to the words given in the margin, extracted from the proposed modifications of No. XXI., "is not two months too long a period, and ought it not to be from the date of delivery rather than from that of despatch?" The limit does not seem very material. I retained the old limit of two months, but would have preferred three months in the case of messages limited to India, its dependencies and Ceylon, and six months in the case of messages for countries beyond India, as Egypt and Europe, for which no provision exists in the rules, but which is introduced in the revised sketch of Rules XI. and XXI. appended to this letter.

8. Practically, I do not believe, were the limit a year, it would increase the number of complaints, perhaps the reverse; for the tendency of such long limit is to lead to complaints being deferred and ultimately forgotten.

9. The postal lines between places so distant, for instance, as Calcutta and Pondicherry, 26 days both ways, would almost entirely absorb the one month your letter suggests as the limit for complaints; and, indeed, in the case of messages, say from Cochin to Calcutta, the time for complaint would have passed ere it would be possible for the complaint of the most diligent person to reach, the postal time to and from not being under 36 days.

10. As respects the commencement of the period within which complaint should be made, the date of despatch would be more convenient than that of delivery, for the former would be shown by the office date, whereas the latter could not exist in cases of non-delivery, and in cases of delay could only be ascertained by a reference to the sending-out office. There would be rarely more than three days gained to the complainant by this change in the rule, and I think a reduction of the present time, viz., two months to one month, would

have the appearance of a desire to take advantage of accidental delays for denying redress in cases otherwise justly entitled to it. To the trouble to which the complainant is put in the recovery of what is frequently a trifling sum, it seems undesirable to add the annoyance of a refusal of justice on merely formal grounds.

11. In conclusion, I would take this opportunity of slightly modifying the sketch revision of Rules XI. and XXI., submitted with my No. 2368 of the 23d February, and of introducing into No. XXI. the changes referred to in paragraph 6 above.

P.S.—It has occurred to me, in referring to the opinion given in paragraph 7 above, to ascertain what proportion of complaints have, during the currency of this official year, been rejected on the ground that the limit for their submission had been passed. I find this number to be 15 or 2⅛ per cent. on the total number of complaints received, which up to date has been 699.

Appendix (H).

From Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, to *E. Palmer,* Esq., Agent, East Indian Railway Company, No. 2140; dated 22 November 1861.

Replying to your No. 10596 of the 1st ultimo, in which objections are raised to this Department placing its telegraph posts within the boundary of the railway embankment between Burdwan and Patna.

I consider that the license under which the railway telegraph is worked, and which gives Government the power of erecting its lines on the posts of the railway company, should they desire to do so, also gives the Department the right to construct its own lines within the limits of the railway fences; and I trust, therefore, that the objections you have raised to our so doing may be withdrawn.

In reference to Mr. Beadon's letter, in which he directed, in view to avoid disputes, that the lines of this Department were not to be constructed within the railway boundary fence, I would remark that such letter could only have been written under the impression that the right in question could be waived without detriment to the interests of the Department.

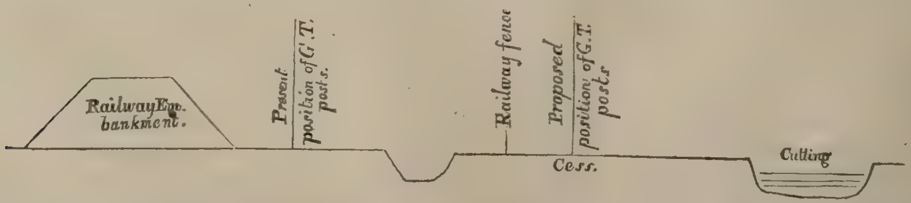
Such, however, is very far from being the case so long as the Government line *viâ* Patna, did not extend beyond that town; and when it led to no important station, and was of no use as an alternative line of communication, it was of little value to the Department, and the question of its easy inspection and repair was of little moment. Now, however, that it is a portion of the main line running through Central India, it is of the highest importance that the Department should possess every facility for its inspection and repair, and such cannot be the case if placed outside the railway fences; for then any inspection necessarily could not do more than detect the grosser causes of interruption, such as the falling of posts or breakage of wire, leaving the less obvious causes produced by breaking of insulators, contacts of the line wire with stays, &c., undetected, and necessitating an inspection on foot which, in the dry season, owing to the extent of the railway excavations at the foot of the embankment, would be exceedingly difficult, and during the rains, when such excavations become filled with water and the country generally flooded, altogether impossible.

After this explanation I trust that the right of the Department to construct a new line from Burdwan to Patna within the railway enclosure may be no longer disputed, and that instructions may be given that all reasonable facility may be afforded to the officers of this Department employed on its construction.

From *E. Palmer,* Esq., Agent, East Indian Railway Company, to Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, No. 12363; dated 25 November 1861.

I have the honour to acknowledge the receipt of your letter No. 2140 of the 22d instant.

2. I consider it objectionable for the Government telegraph posts to be situated within the railway fences, and am still of opinion that if it were practicable, they should be erected on the cess between the fence and the edge of the cutting, as shown in my sketch below.


Railway Embankment.
Present position of G. T. posts.
Railway fence
Proposed position of G. T. posts
Cess.
Cutting

3. Where the space intervening between the railway fence and the edge of the slope is under water, and too low to admit of the posts being erected there, without inconvenience or the probability of the telegraphic communication being interrupted, I shall of course offer

no opposition to their being placed within the fence; but as a precautionary measure against accidents likely to arise from inexperienced persons being upon the railway, in no way subject to the railway authorities, and in order to prevent trespass as much as possible, I consider the Government posts should be erected without the railway fences wherever it can be done.

4. If you are, however, still anxious to erect the Government telegraph within the railway fences, I should prefer your submitting the case to Government for its consideration; such orders on the subject will then be issued as will absolve me from responsibility in cases of accident, should it be decided to erect the posts within the railway boundaries. The objections I have raised are, I think, sufficiently grave to justify me in declining to accede to your request in the meantime.

5. The chief engineer will be desired to issue instructions for every assistance to be given to the officers of Government in erecting and maintaining the telegraph, as requested in the concluding paragraph of your letter.

From Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, to *W. Grey,* Esq., Secretary to the Government of India, Home Department, No. 2433; dated 28th December 1861.

I FORWARD copies of correspondence which has lately passed between the railway authorities and this Department, on the subject of the Government line between Burdwan and Patna now about to be re-constructed.

1. Mr. Palmer, it will be observed, objects to the new line being erected within the limits of the railway fences. He appears to apprehend accidents if the new line is so situated; but his letter is not clear as to the nature of the accidents apprehended, or whether they will happen to the persons, or the constructions of the railway, or of this Department. My letter to Mr. Palmer has pointed out the impossibility, owing to the extensive and irregular railway excavations, either of the construction or of the supervision of a telegraph line outside the railway fences, except at so great a distance as to render the detection of causes of interruption, other than those of the grosser kind, impossible. It also points out that, owing to the liability to extensive flooding of the district through which the line passes, the minute inspection, which would become necessary to detect the less obvious causes of interruption as well as the work of repair, becomes during the rainy season nearly impossible. That Mr. Palmer has little ground for the apprehension of accidents, which he entertains may be inferred from the fact, that although the line from Bidabutty to Raneegunge, a distance of 105½ miles, lies within the limits of the railway fences, no complaint has, to my knowledge, ever been made that its so laying has been the occasion of accident.

The railway company's license gives to the Government the right of attaching wires to the supports of the railway company's telegraph lines,—a right held by every European Government, the British Government not excepted; and there can be no doubt that this major permission includes the minor one of erecting independent lines within the railway fences. The existing permission, however, was withdrawn by Mr. Secretary Beadon's No. 1785 of the 3d August 1858, on the grounds of certain disputes between the *employés* of the two Departments, with the details of which I am not acquainted. My own belief is, that disputes between subsordinates of Departments cannot arise, or at least are easily put an end to, if the Departments concerned earnestly desire to co-operate with each other; and it is only when indications of a contrary spirit are evident that collisions are at all probable. The withdrawal of the permission, I feel assured, can only have been under the impression that no inconvenience to this Department would result. As I have shown that this is far from being the case, and as the experience of the line to Raneegunge has proved that Mr. Palmer's apprehensions are groundless, I trust that the existing prohibition to the construction of the lines of this Department, within the fences of the East Indian railway, may be withdrawn.

EXTRACT from the Proceedings of the Right Honourable the Governor General of India in Council, in the Home Department, Electric Telegraph, No. 643; under date 3d February 1863.

READ a letter No. 2433, dated 28th December, from the Officiating Director General of Telegraphs in India, submitting a copy of correspondence regarding the Government line of Telegraph between Burdwan and Patna about to be re-constructed, and requesting withdrawal of the existing prohibition of the construction of Government lines within the fences of the East India Railway Company.

RESOLUTION.—The Governor General in Council observes, that in 1858 it was suggested by the Public Works Department, that in order to prevent all cause of dispute in future between the officers of the Telegraph Department and those of the East Indian Railway Company, any new telegraph carried along the railway should be placed outside the boundary, and not within it; and that as opportunity offered, existing Government telegraph lines constructed within the East Indian Railway Company's ground should be removed to the outside.

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Orders were issued accordingly to the Telegraph Department from the Home Office on the 3d of August 1858, it being added by way of proviso, that the Government lines should, nevertheless, be so placed as to be easily accessible from the railway.

Colonel Douglas, the Director General of Telegraphs, now represents, with reference to the line from Burdwan to Patna, that the inconvenience of constructing the Government telegraph outside the railway boundary will be so great as to make it essential that the Government should assert its right to erect the line within the boundary. This right, the Governor General in Council observes, is clearly given in Section 6 of Act VIII. of 1860, which is a repetition of Section 5 of the earlier Telegraph Act* of 1854.

* No. XXXIV.

His Excellency in Council is of opinion, that on the representation now made by the Director General of Telegraphs, permission should be given to the Telegraph Department to re-construct the line between Burdwan and Patna within the railway company's boundary; and he directs that the letter from Colonel Douglas be sent to the Public Works Department, with a request that it may be intimated to the agent of the East Indian Railway Company, that the public convenience imperatively requires that the Government should act upon its right to put up the telegraph inside the railway premises; but that it will be done so as not in any way to interfere with the railway telegraph, or with any of the railway arrangements.

His Excellency in Council observes, that the agent should be requested to instruct the officers of the railway not only not to obstruct the officers of the telegraph, but rather to render them such assistance as they can; and, on the other hand, that the Director General should be desired to instruct his subordinates in putting up and working the telegraph inside the railway boundary, to avoid all contact with railway property, and all cause of dispute with the railway authorities.

Ordered accordingly, that a copy of the letter from Lieutenant Colonel Douglas, with a copy of this Resolution, be forwarded to the Public Works Department.

Ordered also, that a copy of this Resolution be sent to the Director General of Telegraphs, with reference to his letter No. 2433, dated the 28th of December, for information and guidance.

I have, &c.
(signed) *W. Grey*,
Secretary to the Government of India.

APPENDIX (I).

Classified List of Offices under the Indian Government.

N.B.—The number of messages and cash collections are exclusive of those on Departmental Service.

The names of Offices only occasionally opened are given in *italics*, and an *asterisk* is placed against the names of Offices opened for the convenience of Governors of Presidencies and Lieutenant Governors of Provinces.

Names of Offices.	In what Circle.	Whether Departmental or Private Building, and whether free or on Rent.	Monthly Rent.	Number of Instruments.	Average of the last Three Months of the Year.				Whether Self-supporting or Unprofitable.	Remarks.
					Monthly Number of Messages.	Monthly Collection.				
			Rs.			Rs.	a.	p.		
1 Ackberpore	Indore	G. P.	-	2	5	18	–	–	unprofitable.	
Agra	Bengal	G. P.	-	3	219	424	–	–	self-supporting.	
Ahmedabad	Bombay	R.	40	2	618	1,174	–	–	ditto.	
Ahmednugger	ditto	R.	50	1	74	132	–	–	unprofitable.	
5 Akyab	Dacca	G. P.	-	2	243	537	–	–	self-supporting.	
Allahabad	Bengal	R.	150	2	318	712	–	–	ditto.	
Allyghur	Punjab	R.	50	2	45	83	–	–	unprofitable.	
Atcheepore	Bengal	R.	40	2	3	6	–	–	ditto.	
Attock	Punjab	G. P.	-	2	21	76	–	–	ditto.	
10 Ballasore	East Coast	G. P.	-	2	29	48	–	–	ditto.	
Bangalore	Madras	R.	110	2	247	438	–	–	self-supporting.	
Bareilly	Punjab	R.	150	2	82	140	–	–	unprofitable.	
Baroda	Bombay	R.	50	2	109	208	–	–	ditto.	
Barrackpore	Bengal	R.	55	2	21	55	–	–	ditto.	
15 Belgaum	Bombay	R.	50	3	85	152	–	–	ditto.	
Bellary	Madras	R.	50	3	80	137	–	–	ditto.	
Benares	Bengal	R.	50	4	235	464	–	–	self-supporting.	
Beora	Indore	G. P.	-	2	9	22	–	–	unprofitable.	
Berhampore	East Coast	R.	50	2	198	488	–	–	self-supporting.	

Classified List of Offices under the Indian Government—*continued.*

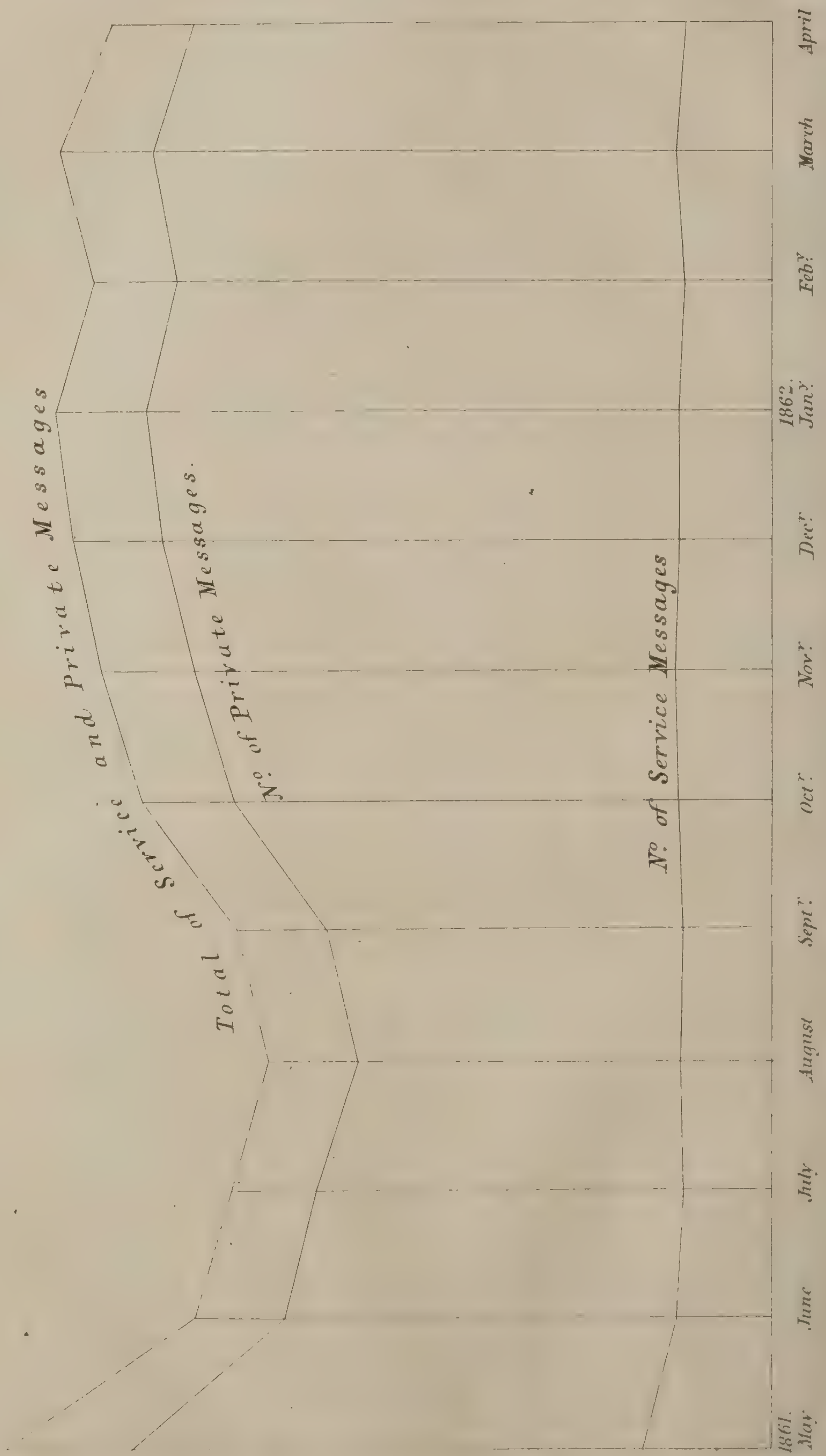
Names of Offices.	In what Circle.	Whether Departmental or Private Building, and whether free or on Rent.	Monthly Rent.	Number of Instruments.	Average of the last Three Months of the Year.				Whether Self-supporting or Unprofitable.	Remarks.
					Monthly Number of Messages.	Monthly Collection.				
			Rs.			Rs.	a.	p.		
20 Bezwarah	East Coast	G. P.	-	4	33	54	–	–	unprofitable.	
Bhaugulpore	Bengal	R.	-	2	35	57	–	–	ditto	
Bimlipatam	East Coast	R.	25	3	167	288	–	–	ditto.	
Bombay	Bombay	R.	450	4	3,831	10,698	–	–	self-supporting.	
Broach	ditto	R.	30	2	245	503	–	–	ditto.	
25 Buddeena	Scind	G. P.	-	2	3	4	–	–	unprofitable.	
Bulsar	Bombay	R.	30	2	27	39	–	–	ditto.	
Burdwan	Bengal	R.	55	3	14	23	–	–	ditto.	
Burhee	ditto	G. P.	-	2	28	51	–	–	ditto.	
Calcutta	ditto	R.	500	7	2,564	12,052	–	–	self-supporting.	
30 Calicut	Madras	R.	45	2	325	602	–	–	ditto.	
Canonore	ditto	R.	50	2	251	534	–	–	ditto.	
Calingapatam	East Coast	R.	15	2	104	208	–	–	unprofitable.	
Cawnpore	Bengal	R.	70	3	271	417	–	–	self-supporting.	
Chanda	Central India	R.	15	2	14	18	–	–	unprofitable.	
35 Chicacole	East Coast	R.	20	2	47	101	–	–	unprofitable.	
Chinoor	Central India	G. P.	-	2	–	-	-	-	ditto.	
Chittagong	Dacca	R.	80	2	43	112	–	–	ditto.	
Cochin	Madras	R.	30	2	403	1,032	–	–	self-supporting.	
Cocanada	East Coast	R.	40	2	459	908	–	–	ditto.	
40 Commilla	Dacca	R.	20	2	35	62	–	–	unprofitable.	
Cuttack	East Coast	R.	80	2	88	200	–	–	ditto.	
Dacca	Dacca	R.	140	2	123	236	–	–	ditto.	
*Dapoorie**	Bombay	G. P.	-	3	24	72	–	–	ditto.	
Deesa	ditto	R.	35	2	61	136	–	–	ditto.	
45 Dehree	Bengal	G. P.	-	2	15	23	–	–	ditto.	
Delhi	Punjab	R.	22	3	135	272	–	–	ditto.	
Dera Ghazee Khan	ditto	G. P.	-	3	30	104	–	–	ditto.	
Dera Ismael Khan	ditto	R.	20	1	39	120	–	–	ditto.	
Dhoolia	Indore	R.	15	2	43	75	–	–	ditto.	
50 Dharwar	Bombay	G. P.	-	3	39	75	–	–	ditto.	
Diamond Harbour	Bengal	G. P.	-	3	13	21	–	–	ditto.	
Dowlaishwaram	East Coast	R.	60	3	90	159	–	–	ditto.	
Furreedpore	Dacca	G. P.	-	2	7	10	–	–	ditto.	
Futtehghur	Bengal	G. P.	-	3	83	146	–	–	ditto.	
55 Fyzabad	ditto	G. P.	-	1	21	44	–	–	ditto.	
Goa	Bombay	R.	26	1	49	85	–	–	ditto.	
*Gudduck**	ditto	G. P.	-	2	–	-	-	-	ditto.	
*Guindy**	Madras	G. P.	-	2	–	-	-	-	ditto.	
Gwalior	Indore	G. P.	-	2	90	199	–	–	ditto.	
60 Henzada	Pegu	G. P.	-	2	13	20	–	–	ditto.	
Hooghly Point	Bengal	G. P.	-	2	4	9	–	–	ditto.	
Hyderabad (Deccan)	Central India	R.	140	3	242	535	–	–	self-supporting.	
Hyderabad (Scind)	Scind	R.	50	3	51	103	–	–	unprofitable.	
Indore	Indore	R.	80	2	351	649	–	–	self-supporting.	
65 Jacobabad	Scind	G. P.	-	2	16	32	–	–	unprofitable.	
Jessore	Dacca	R.	25	2	10	18	–	–	ditto.	
Jubbulpore	Central India	G. P.	-	2	59	107	–	–	ditto.	
Jullundur	Punjab	R.	30	2	54	126	–	–	ditto.	
Karikal	Madras	R.	20	2	43	81	–	–	ditto.	
70 Keamaree	Scind	–	-	2	31	67	–	–	ditto.	
Kedgeree	Bengal	G. P.	-	3	15	24	–	–	ditto.	
Kolapore	Bombay	G. P.	-	2	34	68	–	–	ditto.	
Kookrahatty	Bengal	G. P.	-	2	1	2	–	–	ditto.	
Kootree	Scind	R.	35	2	72	136	–	–	ditto.	
75 Kurnool	Central India	R.	70	2	44	77	–	–	ditto.	
Kurrachee	Scind	G. P.	-	2	319	1,050	–	–	self-supporting.	
Kusmore	ditto	G. P.	-	2	1	2	–	–	unprofitable.	
Kyook Phyou	Dacca	G. P.	-	2	10	14	–	–	ditto.	
Lahore	Punjab	G. P.	-	3	240	780	–	–	self-supporting.	
80 Lucknow	Bengal	R.	80	2	204	442	–	–	ditto.	
Madras	Madras	R.	266	3	1,660	4,013	–	–	ditto.	
*Mahableshwur**	Bombay	G. P.	-	1	82	175	–	–	ditto.	
Malabar Point	ditto	G. P.	-	1	–	-			—	
Maligaum	Indore	G. P.	-	2	27	45	–	–	unprofitable.	

CLASSIFIED LIST of Offices under the Indian Government—*continued.*

Names of Offices.	In what Circle.	Whether Departmental or Private Building, and whether free or on Rent.	Monthly Rent.	Number of Instruments.	Average of the last Three Months of the Year.				Whether Self-supporting or Unprofitable.	REMARKS.
					Monthly Number of Messages.	Monthly Collection.				
			Rs.			*Rs.*	*a.*	*p.*		
85 *Matheran**	Bombay	G. P.	- -	1	–	-	-	-	—	
Meerut	Punjab	G. P.	- -	3	148	369	–	–	self-supporting.	
Menghee	Pegu	G. P.	- -	2	22	38	–	–	unprofitable.	
Mercara	Madras	R.	30	2	134	262	–	–	self-supporting.	
Midnapore	East Coast	G. P.	- -	3	15	25	–	–	unprofitable.	
90 Mirzapore	Central India	G. P.	- -	2	136	259	–	–	self-supporting.	
Mooltan	Punjab	R.	67	2	99	225	–	–	unprofitable.	
Mooradabad	ditto	R.	50	3	68	108	–	–	ditto.	
Mount, St. Thomas	Madras	R.	25	3	43	89	–	–	ditto.	
Mud Point	Bengal	G. P.	- -	2	5	9	–	–	ditto.	
95 Murree*	Punjab	R.	Rent paid by Punjab Government.	1	–	-	-	-	—	
Masulipatam	East Coast	R.	20	1	222	416	–	–	self-supporting.	
Mysore	Madras	G. P.	- -	3	80	136	–	–	unprofitable	
Nagpore	Central India	G. P.	- -	2	111	325	–	–	self-supporting.	
Nassick	Indore	R.	30	2	33	61	–	–	unprofitable.	
100 Negapatam	Madras	R.	60	2	141	266	–	–	self-supporting.	
Nellore	East Coast	R.	45	2	27	49	–	–	unprofitable.	
Nuggur Parker	Scinde	G. P.	- -	2	6	7	–	–	ditto.	
Nynee Tal*	Punjab	R.	600 for the season.	1	–	-	-	-	—	
Ongole	East Coast	R.	20	2	43	80	–	–	ditto.	
105 Ootacamund	Madras	R.	60	1	247	417	–	–	self-supporting.	
Padeng	Pegu	G. P.	- -	2	6	11	–	–	unprofitable.	
*Parrell**	Bombay	G. P.	- -	1	–	-	-	-	—	
Patna	Bengal	R.	50	2	101	201	–	–	ditto.	
Paumben	Madras	G. P.	- -	3	31	71	–	–	ditto.	
110 Pegu	Pegu	G. P.	- -	2	24	39	–	–	ditto.	
Peshawur	Punjab	G. P.	- -	1	87	234	–	–	self-supporting.	
Pondicherry	Madras	R.	45	2	342	694	–	–	ditto.	
Poona	Bombay	R.	80	3	254	473	–	–	ditto.	
Prome	Pegu	G. P.	- -	2	116	234	–	–	unprofitable.	
115 Puttoocotta	Madras	G. P.	- -	2	8	14	–	–	ditto.	
Rajmehal	Bengal	R.	40	2	32	53	–	–	ditto.	
Rajunpore	Scinde	G. P.	- -	2	17	36	–	–	ditto.	
Ramoo	Dacca	G. P.	- -	2	8	13	–	–	ditto.	
Raneegunge	Bengal	G. P.	- -	3	62	100	–	–	ditto.	
120 Rangoon	Pegu	G. P.	- -	2	550	1,512	–	–	self-supporting.	
Rawul Pindee	Punjab	G. P.	- -	3	98	239	–	–	unprofitable.	
Rewah	Central India	G. P.	- -	2	10	20	–	–	ditto.	
Roorkee	Punjab	–	- -	2	14	18	–	–	ditto.	
Sattara	Bombay	R.	70	2	41	79	–	–	ditto.	
125 Saugor	Bengal	G. P.	- -	1	2	5	–	–	ditto.	
Seonee	Central India	G. P.	- -	2	7	13	–	–	ditto.	
Seepree	Indore	G. P.	- -	2	13	26	–	–	ditto.	
Shajempore	Punjab	R.	50	2	29	46	–	–	ditto.	
Shikarpore	Scinde	R.	20	2	24	56	–	–	ditto.	
130 Shoayghcen	Pegu	G. P.	- -	2	63	119	–	–	ditto.	
Simla	Punjab	R.	75	1	130	524	–	–	self-supporting.	
Sukkur	Scinde	R.	15	2	58	96	–	–	unprofitable.	
Surat	Bombay	R.	80	2	523	863	–	–	self-supporting.	
Taroosha	Scinde	G. P.	- -	2	9	14	–	–	unprofitable.	
135 Thyetmyoo	Pegu	G. P.	- -	1	114	210	–	–	self-supporting.	
Tonghoo	ditto	G. P.	- -	1	110	132	–	–	unprofitable.	
Tuticorin	Madras	G. P.	- -	2	200	585	–	–	self-supporting.	
Umballa	Punjab	R.	80	2	167	564	–	–	ditto.	
Umritsur	ditto	R.	30	2	74	156	–	–	unprofitable.	
140 Vellore	Madras	R.	17	2	39	65	–	–	ditto.	
Vingorla	Bombay	R.	10	2	77	129	–	–	ditto.	
Vizagapatam	East Coast	R.	70	3	209	399	–	–	self-supporting.	
Vizianagram	ditto	R.	21	3	41	79	–	–	unprofitable.	
144 Warrangul	Central India	R.	10	2	6	7	–	–	ditto.	

APPENDIX K.

DIAGRAM exhibiting the fluctuation of Messages sent along the lines of the Gov^t. Tel: Dep^t. during each Month of the Official Year 1861-62.



The vertical ordinates represent the N^o. of Messages in each Month.

Scale 5000 Messages per inch.

N^o. 271. Ordered, by the House of Commons, to be printed, 15 May 1863

APPENDIX (J).

STATEMENT showing the Number of MESSAGES, Private and Service, sent from the various Circles, exclusive of those on Departmental Service, from 1 May 1861 to 30 April 1862.

CIRCLES.	May 1861.			June.			July.			August.			September.		
	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.
Bengal - -	4,532	871	5,403	3,408	539	3,947	3,388	628	4,016	2,665	679	3,344	2,825	672	3,497
Bombay - -	6,409	956	7,365	4,398	554	4,952	3,355	447	3,802	3,224	483	3,707	3,671	495	4,166
Central India -	1,132	122	1,254	781	110	891	705	72	777	621	105	726	553	101	654
Dacca - -	236	32	268	136	33	169	187	23	210	184	9	193	223	17	240
East Coast - -	1,176	214	1,390	994	209	1,203	1,167	182	1,349	1,193	124	1,317	1,218	168	1,386
Indore - -	1,260	132	1,392	1,060	109	1,169	958	134	1,092	516	137	653	594	133	727
Madras - -	2,932	491	3,423	2,360	398	2,758	2,271	378	2,649	2,331	304	2,635	2,581	284	2,865
Pegu - - -	714	189	903	396	150	546	449	100	549	636	162	798	591	122	713
Punjab - -	1,294	830	2,124	1,112	716	1,828	1,173	664	1,837	1,215	767	1,982	1,172	766	1,938
Scinde - -	546	225	771	357	139	496	451	153	604	335	132	467	376	141	517
South-east Coast -	174	9	183	191	3	194	155	8	163	116	4	120	111	–	111
TOTAL - -	20,405	4,071	24,476	15,193	2,960	18,153	14,259	2,789	17,048	13,036	2,906	15,942	13,915	2,899	16,814

CIRCLES.	October.			November.			December.			January 1862.		
	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.
Bengal - -	3,494	723	4,217	4,148	837	4,985	4,483	691	5,174	4,433	705	5,138
Bombay - -	4,647	605	5,252	5,747	628	6,375	5,978	595	6,573	5,891	577	6,468
Central India -	772	103	875	725	95	820	803	108	911	648	93	741
Dacca - -	154	13	167	365	30	395	369	30	399	403	25	428
East Coast - -	1,303	180	1,483	1,195	188	1,383	1,288	186	1,474	1,506	203	1,709
Indore - -	792	119	911	625	84	709	624	98	722	522	108	630
Madras - -	3,059	360	3,419	2,889	404	3,293	3,059	360	3,419	3,761	426	4,187
Pegu - - -	677	134	811	800	149	949	856	171	1,027	981	122	1,103
Punjab - -	1,515	521	2,036	1,110	559	1,669	1,099	434	1,533	1,028	473	1,501
Scinde - -	408	164	572	415	154	569	554	211	765	446	183	629
South-east Coast -	139	3	142	168	2	170	148	1	149	164	11	175
TOTAL - -	16,960	2,925	19,885	18,187	3,130	21,317	19,261	2,885	22,146	19,783	2,926	22,709

CIRCLES.	February.			March.			April.			TOTAL.		
	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.	Private.	Service.	TOTAL.
Bengal - -	3,956	634	4,590	3,648	668	4,316	3,369	571	3,940	44,349	8,218	52,567
Bombay - -	5,508	429	5,937	6,018	467	6,485	5,878	376	6,254	60,724	6,612	67,363
Central India -	663	99	762	580	87	667	489	68	557	8,472	1,163	9,635
Dacca - -	472	59	531	399	62	461	403	25	428	3,531	358	3,889
East Coast - -	1,610	296	1,906	1,730	219	1,949	1,428	194	1,622	15,808	2,363	18,171
Indore - -	468	110	578	583	82	665	448	76	524	8,450	1,322	9,772
Madras - -	3,540	387	3,927	3,764	450	4,214	3,617	424	4,041	36,164	4,666	40,830
Pegu - - -	1,012	152	1,164	889	226	1,115	828	164	992	8,829	1,841	10,670
Punjab - -	1,135	454	1,589	1,282	565	1,847	1,250	600	1,850	14,385	7,349	21,734
Scinde - -	408	162	570	501	170	671	487	187	674	5,284	2,021	7,305
South-east Coast -	133	7	140	349	6	355	228	3	231	2,076	57	2,133
TOTAL - -	18,905	2,789	21,694	19,743	3,002	22,745	18,425	2,688	21,113	208,072	35,970	2,44,042

APPENDIX (L).

STATEMENT showing the Amount received for Service Messages at the Telegraph Offices in India

MONTHS.	BENGAL.												BOMBAY.											
	1860-61.			1861-62.			Increases.			Decreases.			1860–61.			1861–62.			Increases.			Decreases.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
May	3,432	2	9	3,904	–	–	471	13	3	-		-	1,404	1	–	2,685	4	–	1,281	3	–	-		-
June	2,704	13	6	2,783	12	–	78	14	6	-		-	872	9	6	1,597	7	6	724	14	–	-		-
July	2,550	1	6	3,333	6	6	783	5	–	-		-	812	14	–	1,200	11	–	387	13	–	-		-
August	2,717	5	9	3,126	13	6	409	7	9	-		-	954	12	–	1,354	10	6	399	14	6	-		-
September	3,006	–	–	3,225	13	6	219	13	6	-		-	1,023	14	–	1,514	14	–	491	–	–	-		-
October	3,085	2	6	3,404	5	6	319	3	–	-		-	1,340	3	–	1,624	12	6	284	9	6	-		-
November	3,547	6	–	3,709	2	6	161	12	6	-		-	1,648	3	–	1,706	12	–	58	9	–	-		-
December	3,941	–	3	3,413	1	–	-		-	527	15	3	1,778	10	6	1,794	1	6	15	7	–	-		-
January	3,253	7	–	3,788	4	–	534	13	–	-		-	1,810	–	9	1,888	14	–	78	13	3	-		-
February	3,507	11	6	3,378	8	6	-		-	129	3	–	1,380	13	–	1,350	11	6	-		-	22	1	6
March	4,060	1	8	3,509	9	6	-		-	550	8	2	1,457	11	–	1,675	3	3	217	8	3	-		-
April	4,006	12	3	3,115	15	–	-		-	890	13	3	2,237	–	–	1,248	3	6	-		-	988	12	6
TOTAL - Rs.	39,812	–	8	40,692	11	6	2,979	2	6	2,098	7	8	16,720	11	9	19,649	9	3	3,939	11	6	1,010	14	–

MONTHS.	EAST COAST.												INDORE.											
	1860-61.			1861-62.			Increases.			Decreases.			1860-61.			1861-62.			Increases.			Decreases.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
May	185	5	–	414	12	–	229	7	–	-		-	317	13	6	353	3	–	35	5	6	-		-
June	174	14	–	308	11	–	133	13	–	-		-	494	11	–	256	3	–	-		-	238	8	–
July	167	3	–	297	4	–	130	1	–	-		-	354	15	–	285	–	–	-		-	69	15	–
August	196	4	6	174	4	6	-		-	22	–	–	294	13	–	317	14	–	23	1	–	-		-
September	209	7	–	294	1	–	84	10	–	-		-	184	12	–	288	13	–	104	1	–	-		-
October	334	10	8	318	11	–	-		-	15	15	8	527	12	6	287	2	–	-		-	240	10	6
November	357	13	8	359	3	–	1	5	4	-		-	442	10	6	174	5	–	-		-	268	5	6
December	225	5	2	421	15	–	196	9	10	-		-	216	8	6	273	11	–	57	2	6	-		-
January	223	4	8	467	5	–	244	–	4	-		-	136	5	–	295	12	–	159	7	–	-		-
February	212	15	–	730	5	6	517	6	6	-		-	136	3	–	266	2	–	129	15	–	-		-
Marcn	198	–	6	549	4	–	351	3	6	-		-	282	14	–	187	12	–	-		-	95	2	–
April	239	15	6	429	7	–	189	7	6	-		-	418	6	–	184	6	–	-		-	234	–	–
TOTAL - Rs.	2,725	2	8	4,765	3	–	2,078	–	–	37	15	8	3,807	12	–	3,170	3	–	509	–	–	1,146	9	–

MONTHS.	PUNJAB.												SCINDE.											
	1860-61.			1861-62.			Increases.			Decreases.			1860–61.			1861–62.			Increases.			Decreases.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
May	2,407	2	–	3,560	1	–	1,152	15	–	-		-	476	13	–	619	8	–	142	11	–	-		-
June	2,006	7	6	2,469	9	–	463	1	6	-		-	360	4	–	350	9	–	-		-	9	11	–
July	2,386	5	–	1,999	14	–	-		-	386	7	–	392	13	–	307	5	–	-		-	85	8	–
August	1,936	4	6	3,488	1	6	1,551	13	–	-		-	354	14	–	298	13	–	-		-	56	1	–
September	2,044	9	6	3,560	3	–	1,515	9	6	-		-	479	2	–	348	12	–	-		-	130	6	–
October	2,235	10	3	1,729	11	–	-		-	505	15	3	476	5	–	402	–	–	-		-	74	5	–
November	1,561	13	6	1,809	12	–	247	14	6	-		-	621	8	–	370	1	–	-		-	251	7	–
December	1,589	4	6	1,732	8	6	143	4	–	-		-	503	3	–	680	9	–	177	6	–	-		-
January	2,096	14	6	2,142	–	–	45	1	6	-		-	507	3	–	541	3	–	34	–	–	-		-
February	2,063	5	–	1,758	10	–	-		-	304	11	–	750	7	–	499	8	–	-		-	250	15	–
March	1,690	7	–	2,028	8	–	338	1	–	-		-	478	–	–	455	2	–	-		-	22	14	–
April	1,936	14	–	2,222	13	–	285	15	–	-		-	469	7	–	615	9	–	146	2	–	-		-
TOTAL - Rs.	23,955	1	3	28,501	11	–	5,743	11	–	1,197	1	3	5,869	15	–	5,488	15	–	500	3	–	881	3	–

- - - - - - - Appendix (L).

luring the Years 1860–61 and 1861–62, and the Increases and Decreases in each Circle.

CENTRAL INDIA.				DACCA.			
1860–61.	1861–62.	Increases.	Decreases.	1860–61.	1861–62.	Increases.	Decreases.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
253 2 6	530 14 6	277 12 –	– – –	9 7 –	70 14 6	61 7 6	—
230 7 6	370 14 –	140 6 6	– – –	314 6 –	68 5 –	– –	246 1 –
482 13 –	301 4 –	– – –	181 9 –	477 11 –	46 9 –	– –	431 2 –
206 2 –	408 – 6	201 14 6	– – –	572 2 –	14 4 –	– –	557 14 –
472 – –	357 13 6	– – –	114 2 6	2 15 –	37 1 6	34 2 6	—
222 4 –	341 3 –	118 15 –	– – –	20 5 –	25 5 –	5 – –	—
222 8 –	291 9 6	69 1 6	– – –	48 – –	64 1 –	16 1 –	—
326 11 6	315 7 6	– – –	11 4 –	147 5 –	55 3 –	– –	92 2 –
770 2 6	293 – –	– – –	477 2 6	112 6 –	80 1 –	– –	32 5 –
242 3 –	336 9 –	94 6 –	– – –	177 6 –	130 9 –	– –	46 13 –
157 12 6	270 2 6	112 6 –	– – –	117 – 6	168 1 6	51 1 –	—
262 9 6	216 15 –	– – –	45 10 6	114 13 6	47 11 –	– –	67 2 6
3,848 12 –	4,033 13 –	1,014 13 6	829 12 6	2,113 13 6	808 1 6	167 12 –	1,473 7 6

MADRAS.				PEGU.			
1860–61.	1861–62.	Increases.	Decreases.	1860–61.	1861–62.	Increases.	Decreases.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1,520 12 8	1,466 3 8	– – –	54 9 –	486 11 –	418 3 –	– –	68 8 –
1,096 5 2	1,247 9 –	151 3 10	– – –	543 6 –	337 4 –	– –	206 2 –
859 2 4	1,073 8 6	214 6 2	– – –	319 1 6	200 13 –	– –	118 4 6
1,260 10 6	908 13 –	– – –	351 13 6	449 11 6	339 2 –	– –	110 9 6
920 4 9	912 – –	– – –	8 4 9	301 – –	255 – –	– –	46 – –
1,207 12 2	1,233 15 6	26 3 4	– – –	339 1 4	235 2 –	– –	103 15 4
1,414 10 –	1,207 15 –	– – –	206 11 –	333 12 10	324 11 6	– –	9 1 4
1,347 13 8	1,191 10 –	– – –	156 3 8	370 9 6	334 4 6	– –	36 5 –
1,718 14 5	1,332 8 6	– – –	386 5 11	375 13 9	285 5 6	– –	90 8 3
1,358 – 8	1,274 10 –	– – –	83 6 8	404 7 7	315 10 6	– –	88 13 1
1,232 – 4	1,422 4 –	190 3 8	– – –	432 13 6	386 15 6	– –	45 14 –
1,494 8 6	1,227 9 –	– – –	266 15 6	367 7 9	397 12 –	30 4 3	—
15,430 15 2	14,498 10 2	582 1 –	1,514 6 –	4,724 – 3	3,830 3 6	30 4 3	924 1 –

OUTH EAST COAST AND SHARE DUE BY CEYLON.				TOTAL OF		TOTAL.		NET.	
1860–61.	1861–62.	Increases.	Decreases.	1860–61.	1861–62.	Increases.	Decreases.	Increases.	Decreases.
s. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
9 – –	43 3 6	– –	25 12 6	10,562 6 5	14,066 3 2	3,652 10 3	148 13 6	3,503 12 9	—
8 3 –	39 14 –	– –	38 5 –	8,876 7 2	9,830 1 6	1,692 5 4	738 11 –	953 10 11	—
4 11 8	43 13 –	19 1 4	– –	8,827 11 –	9,089 8 –	1,534 10 6	1,272 13 6	261 13 –	—
7 5 –	16 4 –	8 15 –	– –	8,950 4 9	10,447 – 6	2,595 1 9	1,098 6 –	1,496 11 9	—
6 2 6	43 11 –	37 8 6	– –	8,650 2 9	10,838 2 6	2,486 13 –	298 13 3	2,187 15 9	—
9 4 –	9 – –	– –	– 4 –	9,798 6 5	9,611 3 6	753 14 10	941 1 9	– –	187 2 11
4 4 –	13 1 6	– –	41 2 6	10,252 9 6	10,038 10 –	554 11 10	776 11 4	– –	221 15 6
7 4 –	20 13 –	3 9 –	– –	10,463 11 7	10,233 4 –	593 6 4	823 13 11	– –	230 7 7
1 15 –	71 10 6	39 11 6	– –	11,036 6 7	11,185 15 6	1,135 14 7	986 5 8	149 8 11	—
7 – –	65 14 6	38 14 6	– –	10,260 7 9	10,115 2 6	780 10 –	925 15 3	– –	145 5 3
5 5 –	22 1 6	– –	43 3 6	10,172 2 –	10,674 15 9	1,260 7 5	757 9 8	502 13 9	—
2 15 6	13 – –	– –	69 15 6	11,630 13 6	9,719 4 6	651 12 9	2,563 5 9	– –	1,911 9 –
3 5 8	402 6 6	147 11 10	218 11 –	1,19,481 9 5	1,25,841 7 5	17,692 6 7	11,332 8 7	9,056 6 3	2,696 8 3

E. E.

Net Increase - - - *Rs.* 6,359. 14. –.

APPENDIX (M). - - - - - - - - - -

STATEMENT showing the Amount received for Private Messages at the Telegraph Offices in India

MONTHS.	BENGAL.												BOMBAY.											
	1860-61.			1861-62.			Increases.			Decreases.			1860-61.			1861-62.			Increases.			Decreases.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
May	10,095	8	9	15,886	11	–	5,791	2	3	-		-	12,892	2	1	15,026	7	–	2,134	4	11	-		-
June	8,130	7	1	12,574	5	3	4,443	14	2	-		-	8,889	11	6	11,317	3	–	2,427	7	6	-		-
July	9,323	15	6	11,579	10	6	2,255	11	–	-		-	7,773	11	–	9,798	8	–	2,024	13	–	-		-
August	9,623	8	–	9,033	8	9	-		-	589	15	3	6,857	7	3	8,651	1	–	1,793	9	9	-		-
September	9,900	1	1	9,784	7	6	-		-	115	9	7	9,158	1	6	8,681	14	–	-		-	476	3	6
October	11,708	14	6	12,121	7	–	412	8	6	-		-	14,258	6	6	10,685	4	6	-		-	3,573	2	–
November	13,199	–	7	14,701	10	6	1,502	9	11	-		-	14,398	11	–	13,691	15	–	-		-	706	12	–
December	14,328	–	6	16,223	–	6	1,895	–	–	-		-	15,774	2	–	15,040	4	–	-		-	733	14	–
January	12,434	7	3	17,006	2	3	4,571	11	–	-		-	13,935	12	–	15,148	11	6	1,212	15	6	-		-
February	15,990	10	3	14,600	14	3	-		-	1,389	12	–	15,531	13	6	13,106	12	9	-		-	2,425	–	9
March	15,321	9	9	14,045	14	3	-		-	1,275	11	6	14,238	–	–	14,805	15	3	567	15	3	-		-
April	15,976	5	–	14,398	2	3	-		-	1,578	2	9	14,702	5	–	14,117	3	6	-		-	585	1	6
TOTAL - Rs.	1,46,032	8	3	1,61,955	14	–	20,872	8	10	4,949	3	1	1,48,410	3	4	1,50,071	3	6	10,161	1	11	8,500	1	9

MONTHS.	EAST COAST.												INDORE.											
	1860-61.			1861-62.			Increases.			Decreases.			1860-61.			1861-62.			Increases.			Decreases.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
May	2,111	12	–	2,146	15	–	35	3	–	-		-	1,971	10	–	2,985	3	–	1,013	9	–	-		-
June	2,144	10	4	1,811	9	6	-		-	333	–	10	1,317	15	–	2,587	15	–	1,270	–	–	-		-
July	2,497	7	2	2,110	13	–	-		-	386	10	2	991	15	–	2,275	13	–	1,283	14	–	-		-
August	2,271	9	10	2,194	14	–	-		-	76	11	10	984	15	6	1,130	1	–	195	1	6	-		-
September	1,795	7	–	2,481	15	–	686	8	–	-		-	1,514	2	6	1,170	11	–	-		-	343	7	6
October	1,959	14	2	2,440	1	–	480	2	10	-		-	3,166	13	–	1,606	12	–	-		-	1,560	1	–
November	2,075	5	10	2,357	14	6	282	8	8	-		-	2,649	1	–	1,238	7	–	-		-	1,410	10	–
December	2,442	8	8	2,375	9	–	-		-	66	15	8	2,689	5	6	1,210	8	–	-		-	1,478	13	6
January	2,652	3	–	2,719	6	–	67	3	–	-		-	2,375	7	–	1,008	11	–	-		-	1,366	12	–
February	2,625	12	2	2,972	1	–	346	4	10	-		-	1,909	12	6	964	7	–	-		-	945	5	6
March	2,858	12	4	3,376	6	6	517	10	2	-		-	2,432	12	–	1,174	12	–	-		-	1,258	–	–
April	2,391	14	2	2,728	13	–	336	14	10	-		-	2,250	12	–	885	12	–	-		-	1,365	–	–
TOTAL - Rs.	27,827	4	8	29,716	5	6	2,752	7	4	863	6	6	24,204	9	–	18,239	–	–	3,762	8	6	9,728	1	6

MONTHS.	PUNJAB.												SCINDE.											
	1860-61.			1861-62.			Increases.			Decreases.			1860-61.			1861-62.			Increases.			Decreases.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
May	2,099	2	–	3,195	5	–	1,096	3	–	-		-	1,482	7	–	1,281	8	–	-		-	200	15	–
June	1,967	11	6	2,608	10	6	640	15	–	-		-	892	14	–	885	3	–	-		-	7	11	–
July	1,796	–	–	2,581	12	–	785	12	–	-		-	817	–	–	1,044	9	–	227	9	–	-		-
August	1,904	9	–	2,521	7	–	416	13	7	-		-	879	5	–	786	8	–	-		-	92	13	–
September	,674	10	9	2,405	8	–	-		-	269	2	9	1,024	13	–	930	9	–	-		-	94	4	–
October	3,253	6	9	2,992	3	–	-		-	261	3	9	1,031	12	–	1,005	4	6	-		-	26	7	6
November	3,195	6	–	2,356	15	–	-		-	838	7	–	1,052	2	–	993	8	–	-		-	58	10	–
December	3,084	11	6	2,448	13	6	-		-	635	14	–	1,147	12	–	1,407	9	–	259	13	–	-		-
January	2,920	8	–	2,374	15	6	-		-	545	8	6	965	7	–	1,117	3	–	151	12	–	-		-
February	2,691	–	6	2,495	15	6	-		-	195	1	–	1,236	12	–	1,036	7	–	-		-	200	5	–
March	3,221	1	–	2,742	3	6	-		-	478	13	6	1,168	5	–	1,277	8	–	109	3	–	-		-
April	2,829	12	6	2,469	13	–	-		-	359	15	6	1,163	–	–	1,175	10	–	12	10	–	-		-
TOTAL - Rs.	31,637	15	11	30,993	9	6	2,939	11	7	3,584	2	–	12,861	9	–	12,941	6	6	760	15	–	681	1	6

- - - - - - - - APPENDIX (M).

during the Years 1860–61 and 1861–62, and the Increases and Decreases in each Circle.

CENTRAL INDIA.				DACCA.			
1860–61.	1861–62.	Increases.	Decreases.	1860–61.	1861–62.	Increases.	Decreases.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1,331 13 6	2,920 7 –	1,588 9 6	– – –	152 – –	673 – –	521 – –	—
1,134 – –	1,942 12 6	808 12 6	– – –	109 4 –	229 10 6	120 6 6	—
736 – 6	1,970 9 6	1,234 9 –	– – –	98 2 –	354 6 –	256 4 –	—
675 9 –	1,543 7 6	867 14 6	– – –	85 8 6	413 1 6	327 9 –	—
727 – –	1,266 12 6	539 12 6	– – –	140 15 6	484 9 –	343 9 6	—
964 – 6	1,688 7 –	724 6 6	– – –	200 – –	273 12 –	73 12 –	—
1,098 5 6	1,537 3 6	438 14 –	– – –	265 2 –	786 12 6	521 10 6	—
1,266 11 6	1,916 7 –	649 11 6	– – –	395 6 6	777 12 6	382 6 –	—
1,940 10 –	1,463 5 –	– – –	477 5 –	328 5 –	850 15 –	522 10 –	—
1,672 1 6	1,547 14 6	– – –	124 3 –	524 4 –	1,009 11 6	485 7 6	—
1,770 2 –	1,255 3 6	– – –	514 14 6	907 3 –	986 3 –	79 – –	—
1,825 1 –	1,003 0 6	– – –	822 – 6	766 – 3	937 13 6	171 13 3	—
15,141 7 –	20,055 10 –	6,852 10 –	1,938 7 –	3,972 2 9	7,777 11 –	3,805 8 3	—

MADRAS.				PEGU.			
1860–61.	1861–62.	Increases.	Decreases.	1860–61.	1861–62.	Increases.	Decreases.
Rs. a. p.	Rs. a, p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
5,038 9 9	5,753 15 6	715 5 9	– –	826 3 6	1,481 4 –	655 – 6	—
4,504 5 11	4,529 1 6	24 11 7	– –	842 15 –	770 2 –	– –	72 13 –
4,504 7 7	4,111 10 6	– – –	392 13 1	708 7 6	1,009 1 6	300 10 –	—
5,539 5 11	4,638 10 6	– – –	900 11 5	792 8 8	1,520 – 6	727 7 10	—
4,815 1 7	5,201 2 6	386 – 11	– –	897 15 –	1,332 13 –	434 14 –	—
5,530 3 4	5,587 9 –	57 5 8	– –	802 12 10	1,311 1 –	508 4 2	—
5,680 12 10	6,308 9 6	627 12 8	– –	898 15 –	2,121 1 –	1,222 2 –	—
6,299 14 6	6,678 9 6	378 11 –	– –	924 14 6	2,232 11 6	1,307 13 –	—
6,492 1 6	7,558 7 –	1,066 5 6	– –	978 7 10	2,498 – –	1,519 8 2	—
6,835 10 4	7,031 15 –	196 4 8	– –	1,016 1 10	2,426 2 6	1,410 – 8	—
7,282 11 –	7,477 12 6	195 1 6	– –	1,028 15 4	2,084 10 –	1,055 10 8	—
7,150 8 –	7,351 1 6	200 9 6	– –	925 5 4	1,790 12 6	865 7 2	—
69,673 12 3	72,228 8 6	3,848 4 9	1,293 8 6	10,643 10 4	20,577 11 6	10,006 14 2	72 13 –

SOUTH-EAST COAST AND SHARE DUE BY CEYLON.				TOTAL OF		TOTAL.		NET.	
1860–61.	1861–62.	Increases.	Decreases.	1860–61.	1861–62.	Increases.	Decreases.	Increases.	Decreases.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1,341 – 10	1,420 5 10	79 5 –	–	39,342 5 5	52,771 1 4	13,629 10 11	200 15 –	13,428 11 11	—
936 4 –	957 7 4	21 3 4	–	30,870 2 4	40,214 – 1	9,757 6 7	413 8 10	934 13 9	—
612 8 4	949 5 8	336 13 4	–	29,859 10 7	37,786 2 8	8,705 15 4	779 7 3	7,926 8 1	—
694 13 8	663 13 6	– –	31 – 2	30,259 4 9	32,896 9 3	4,328 8 2	1,691 3 8	2,637 4 6	—
1,722 7 6	1,487 4 9	– –	235 2 9	34,370 11 5	35,227 10 3	2,390 12 11	1,533 14 1	856 14 10	—
1,854 2 6	2,003 12 3	149 9 9	–	44,730 6 1	41,715 9 3	2,406 1 5	5,420 14 3	– –	3,014 12 10
1,294 2 –	2,384 14 6	1,090 12 6	–	45,806 15 9	48,478 15 –	5,686 6 3	3,014 7 –	2,671 15 3	—
1,274 2 –	2,466 7 6	1,192 5 6	–	49,627 9 2	52,777 12 –	6,065 12 –	2,915 9 2	3,150 2 10	—
1,319 3 2	2,818 8 –	1,499 4 10	–	46,342 7 9	54,564 4 3	10,611 6 –	2,389 9 6	8,221 12 6	—
1,704 9 8	2,760 14 6	1,056 4 10	–	51,738 8 3	49,953 3 6	3,494 6 6	5,279 11 3	– –	1,785 4 9
1,415 9 2	3,704 5 9	2,288 12 7	–	51,645 – 7	52,930 14 3	4,813 5 2	3,527 7 6	1,285 13 8	—
1,147 12 10	2,408 8 6	1,260 11 8	–	51,128 12 1	49,266 10 3	2,848 2 5	4,710 4 3	– –	1,862 1 10
15,316 11 8	24,025 12 1	8,975 3 4	266 2 11	5,05,721 14 2	5,48,582 12 1	74,737 13 8	31,876 15 9	49,523 1 4	6,662 3 5

E. E.

Net Increase - - - *Rs.* 42,860. 13. 11.

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Appendix (N).

From *H. W. J. Wood*, Esq., Secretary to the Bengal Chamber of Commerce, to Major *C. Douglas*, Officiating Director General of Telegraphs in India; dated 2 February 1861.

The Committee of the Chamber of Commerce desire me to draw your attention to the practice which they are informed prevails in your office, of selling as waste paper copies of messages received by electric telegraph.

They are sure they need hardly point out to you, who are probably unaware of the practice in question, how objectionable such a course is, even though the dates of messages be a twelvemonth old.

I send you three of these copies of messages which have been handed to the Chamber. Samples of sugar were wrapped up in them, and on inquiry it was stated that they had been obtained as waste paper in the bazaar.

From Major *C. Douglas*, Officiating Director General of Telegraphs in India, to *H. W. J. Wood*, Esq., Secretary to the Bengal Chamber of Commerce, No. 8859; dated 20 February 1861.

In reply to yours of the 2nd February, I have the honour to annex copy of a Circular Order, dated 19th November 1859, from which it will be seen that the practice of selling, as waste paper, copies of messages is a contravention of the rules of this Department. Much difficulty has, however, been experienced in disposing of the old messages in Calcutta by burning, the office premises being every way unfit for such an operation, and the owners of a neighbouring steam engine finding them unfit for engine fuel objecting to burn more than a very limited quantity daily, and restricting the time at which this can be done to between the hours of five and six. The only other place at which messages can be burnt is the departmental store-yard at Kidderpore, and the inconvenience of sending messages to so great a distance from the office for destruction is great, as is also that caused by the necessity of having a superior officer of the Department present at the operation; and opportunity may have been taken by the persons in charge to remove a part of the messages while in transit to Kidderpore, and to sell them as waste paper.

If the Chamber could conveniently ascertain and inform me from whom the paper was purchased, I will have any that may be found seized by the police as stolen property, and will then endeavour to discover how it came into the present holder's possession. Meanwhile I have issued instructions which prohibit the removal from the office premises of waste paper of any description.

I beg you will offer my thanks to the Chamber for bringing the subject to my notice.

Circular Order, No. 887; dated 19 November 1859.

Under the orders of the Honourable the President in Council, dated the 8th instant, all copies of messages sent by the telegraph are to be destroyed by fire three months after transmission.

2. The originals of the messages received for transmission in each office are to be retained for 12 calendar months, and thereafter destroyed by fire also.

3. To prevent the possibility of private and confidential messages being divulged, all assistants in charge of offices are strictly empowered to see the messages destroyed by burning in their own presence. The duty is not to be entrusted to any other persons, and its performance is to be reported monthly to the deputy superintendent of each circle.

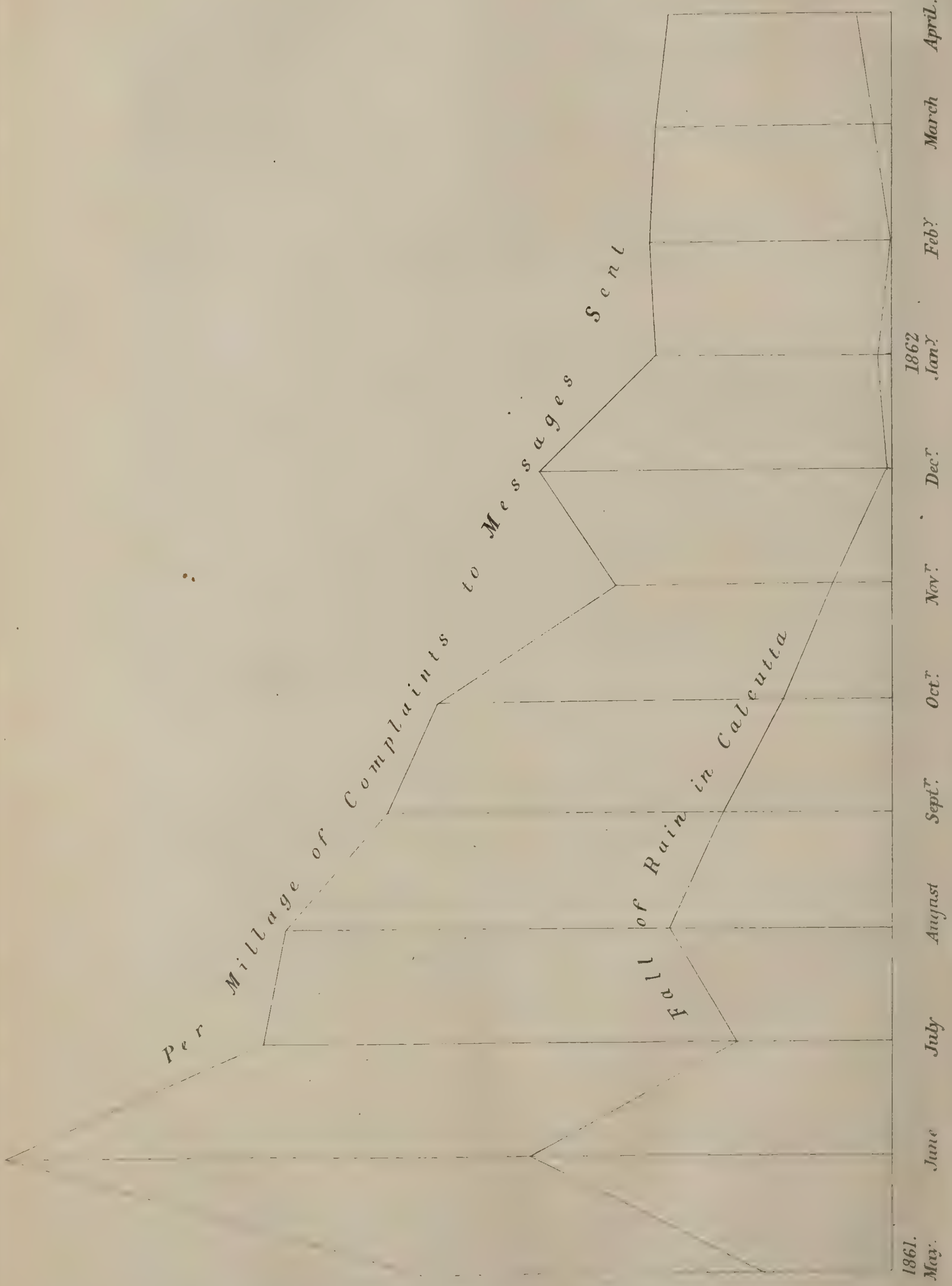
(signed) *W. B. O'Shaughnessy*,
Superintendent of Telegraphs in India.

From Major *C. Douglas*, Officiating Director General of Telegraphs in India, to *W. Grey*, Esq., Secretary to the Government of India, Home Department, No. 9526; dated 20 April 1861.

In consequence of an article which appeared in the "Bombay Times and Standard" newspaper of the 28th ultimo, to the effect that telegraph messages at Bombay had been treated as waste paper, and had been picked up by strangers in the Colaba office compound, I called upon Captain Murray, the Superintendent of Telegraphs, Western Division, for an explanation of the circumstances alluded to. His reply covering correspondence on the subject between Mr. Wickham, the Deputy Superintendent of the Bombay Circle and the Bombay Government, is enclosed. The rules of this Department prescribe the destruction of

APPENDIX O.

DIAGRAM shewing the relation between the percentage of complaints, and fall of Rain for each Month of the Year 1861–62.



The scale for weather is $\frac{1}{10}$ of an inch for each inch of rain-fall.

The scale for Complaints is 1 inch for each Complaint per 1000 Messages.

N^o 271. Ordered, by the House of Commons, to be printed, 15 May 1863

Henry Hansard, Printer.

of the old messages at all offices by fire. This rule was made at a time when two copies of every message were made, the one being for the Complaint Office, and the other for the Local Examiners' Office, at the head-quarters of each circle.

By a recent arrangement the Local Examiners' Offices have been abolished, and duplicates of messages are now no longer made.

The originals of all messages and copies taken in transit are posted daily to the Complaint Office, thereby rendering any provision for their destruction unnecessary, except in Calcutta; for in no other office can any message exist, except by fraud or neglect, more than a day old.

From the circumstance that the offices at which these copies of messages have hitherto been stored have always been at large stations, their destruction by burning on the premises themselves has been next to impossible, and their removal to a distance has become necessary with the attendant risk of the messages being made away with *en route*, or the operation of destruction being inefficiently performed either by carelessness or intention. A case of this nature was lately brought to my notice by the Chamber of Commerce in Calcutta. A copy of the correspondence is annexed.

As the paper composing the old messages is valuable, and as their destruction cannot be performed on the premises, and as their removal to a distance for this purpose is open to the objections already shown, I would propose obtaining a guillotine paper-cutting machine for destroying the messages, the cost of which would soon be repaid by the value of the old paper, which could then be sold; and I have to solicit the sanction of Government for the purchase of such a machine, which would also save the labour of a duftry engaged on cutting paper and forms for the printer.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to *W. Grey*, Esq., Secretary to the Government of India, Home Department, No. 99; dated 13 May 1861.

I have the honour to refer the Government to paragraph 4 of my No. 9526 of the 20th April, as a probable explanation of the circumstances alluded to in the "Englishman" newspaper of this day, in an article reflecting on the Telegraph Department.

Since writing the above letter, and as a further precaution to ensure the privacy of the message examining branch, I have directed that the room in which the clerks are employed in this duty shall be effectually separated from the other offices of the establishment, and intrusion prevented by lock and key.

I feel no doubt that the messages alluded to in the "Englishman" form a portion of those brought to my notice by the Chamber of Commerce, and to which I directed the attention of Government in the above-mentioned letter.

Appendix (P).

Extract from the "Annales Télégraphiques," published in Paris in February 1862, page 97.

"Adresse des Dépêches. M. le Directeur Général des Lignes Télégraphiques vient d'Adresser aux Présidents des Chambres de Commerce la Lettre suivante, relative à l'Addresse des Dépêches.

"Paris, le 20th Janvier 1862.

"Monsieur, une tendance chaque jour plus marquée a successivement amené le public á donner aux dépêches télégraphiques des addresses incomplétes. Un grand nombre d'expéditeurs, se reposant sur la notoriété qu'ils attribuent à leurs correspondants, se dispensent d'indiquer la demeure du destinataire, et créent ainsi de sérieux embarras au service télégraphique, tout en compromettant leurs propres intérêts.

"Quelle que soit, en effet, la notoriété d'une personne dans la ville qu'elle habite, il suffit rarement, pour assurer la remise des dépêches qui lui sont destinées, de la designer par son nom. Si ce nom vient à être altéré dans la transmission, ou s'il est porté par d'autres personnes dans le même lieu, l'indication du domicile en est le complément indispensable. Faute d'une précaution aussi naturelle, un grand nombre de dépêches, arrêtées au bureau d'arrivée, ne parviennent à destination qu'après un long délai, et alors qu'elles sont devenues inutiles. Les recherches même sont souvent infructueuses, et il peut arriver qu'une dépêche destinée à un négociant soit remise à un concurrent du même nom.

"A diverses reprises, ces difficultés avaient appelé mon attention, mais je devais surtout m'en préoccuper au moment où l'abaissement du tarif détermine une augmentation considérable dans le nombre des dépêches, et où je dois avant tout, pour assurer l'ordre dans le service, en écarter toutes les causes d'incertitude et d'embarras. Aussi me parait-il important que le public n'ignore pas que l'administration ne peut assurer la remise des correspondances que si l'addresse porte expressément la rue et le numéro de l'habitation du destinataire,

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destinataire, et qu'il ne serait pas fondé à se plaindre, si, en l'absence de ces renseignements, les dépêches ne parvenaient pas à destination.

"J'ai l'honneur, Monsieur, de vous prier de vouloir bien communiquer ces explications aux diverses personnes dont les intérêts vous sont confiés et auxquelles il peut être utile de connaitre les conditions où se trouve, à cet égard, le service télégraphique."

Appendix (Q).

Approximate Statement of the Quantity and Value of Stores sent from England for the use of the Department during the Year 1861–62.

Names of Stores.		Number or Quantity.	Invoice Rate.	Per.	Amount. As per Invoice.	Amount. At 2*s.* per Rupee.
			£. *s.* *d.*		£. *s.* *d.*	*Rs.* *a.* *p.*
Hamilton's posts complete	*No.*	89,000	1 10 –	each	133,500 – –	1,335,000 – –
Anchors and stays for ditto	"	500	– 11 7	"	289 11 8	2,895 13 4
Couplings for ditto	"	1,000	1 4 6	"	1,225 – –	12,250 – –
Wooden poles for ditto	"	83,100	– 3 –	"	12,465 – –	124,650 – –
Insulators	"	108,000	– 1 9	"	9,850 – –	98,500 – –
Brackets	"	206,000	– – 10	"	8,583 6 8	85,833 5 4
Cast-iron caps	"	88,000	– – 8	"	2,933 6 8	29,333 5 4
Wire, iron, No. 5,	*Tons*	413 7 2 15	21 – –	ton	8,681 – 4	86,811 – 2
Ditto, small	"	1 0 18	27 15 –	"	27 19 6	275 9 4
Digney's instruments	*No.*	1 40	16 12 –	each	2,324 – –	23,244 – –
					Total English Cost	1,798,793 2 6
				Add	Packing-cases	31,000 – –
					Freight	304,965 12 –
					Total Cost – *Rs.*	2,134,758 14 6

Appendix (R).

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to *A. M. Monteath*, Esq., Under Secretary to the Government of India, Home Department, No. 1263; dated 20 August 1861.

In compliance with the orders of Government, in the Financial Department, No. 5039 of the 24th April last, and in reply to your No. 926 of the 8th May, I submit a revised schedule of the establishment of this Department, showing a total monthly net saving of *Rs.* 2,096. 5. 6., which takes into account the increase of 250 rupees per month, lately sanctioned by the Government, to the salary of the compiler of departmental accounts.

2. It will be seen that the principal reductions have been consequent on the abolition of the grade of European artificers, and the substitution of a grade of mounted native artificers in lieu of the present foot line-guards and horse patrols. As respects the former of these proposals, I consider that as the construction of lines has, as a rule, ceased throughout the Department, the permanent employment of Europeans on the low pay given to the men of this grade employed in the Department is both unnecessary and undesirable. Their temporary employment can be had recourse to whenever extensive construction or reconstruction renders the step desirable. They would in such cases be under the eye and immediate personal control of the inspector who may have charge of the construction. Their employment in independent charge of sections of lines after construction, removes them from

control, and gives them the opportunity of leaving the work entirely to the natives under them, and of increasing their pay by the large bills they make a point of sending in, and over which neither deputy superintendents nor auditor has any effective control.

3. The line guards are natives, and are employed to patrol sections of the line varying in length from eight to twelve miles. It can rarely however, be in their power to know when an interruption occurs, except it has arisen from such obvious cause as the breakage of the wires or the falling of its supports; and even on the occurrence of interruptions from such causes, in the larger number of cases, communication is restored, not by the line guards, but by peons and others, as may be available, sent out from signal offices for the purpose, who rarely find the line guards at their posts, or, when present, willing to aid in the manual labour of restoring communication.

4. The above remarks apply also to the establishment of horse patrols.

5. In the accompanying correspondence it will be seen that eight out of ten of the deputy superintendents consider that both of the above classes may be dispensed with. I extract from other letters, not now sent, opinions of three of the number on the uselessness of these men. Mr. Cappel, deputy superintendent, now in Ceylon, and late in charge of the East Coast Circle, in reply to the questions put to him on the subject, remarks:—

"I do not approve of line guards, and consider the establishment already recommended would quite provide for the wants of this circle. In all my experience I can call to mind no instance of a line guard having repaired an accident and restored communication, although I at one time gave much thought and time to the endeavour to train to usefulness a body of these men."

6. Mr. Bailey, one of the oldest and most experienced of the deputy superintendents, and at present in charge of the East Coast Circle, remarks as follows:—

"These patrols are of no use whatever in preventing interruption, and very few of them will do coolies' work in cases of emergency. They are, in fact, the class of men described on para. 5 of the Director General's Circular, No. 83, of the 6th instant, as men too idle to earn their livelihood by honest labour who contrive to get attached as peons, &c., to Government offices, knowing this to be their only chance of getting good pay with the lightest possible work.

"The line patrols, meaning the line guards, are not only not to be depended upon to repair damages, but they do not even walk regularly over their beats, although the books are passed on from station to station in good time. I have ascertained that the books are often sent on by travellers while the patrol remains in his village, and it is a common practice for the man who draws pay from the department, and who is supposed to be acquainted with his work, to put a substitute in his place for weeks together * * * but I submit that a patrol establishment is not at all necessary. An assistant artificer stationed at each end of the line to go out on horse-back during interruption, and an inspector or an artificer to make a regular monthly inspection, would keep the line in good order and provide for all emergencies."

7. The following are remarks by Mr. Blissett, Superintendent of Telegraphs, Southern Division, on the same subject:—

"Having myself found that they (horse and foot patrols) were not available or forthcoming for the performance of the duties required of them when interruption occurred, and many of this body having been discharged for such neglect of their duties on particular and pressing occasions, I endorse the opinion expressed by Mr. Bailey regarding their utter uselessness."

8. The Deputy Superintendent of Pegu, however, considers it absolutely necessary that a small number of line guards should be appointed to patrol the portion of line crossing the Arracan mountains. Considering the reported difficulties of travelling over this section of the lines, and in absolute personal ignorance of the nature of the country, I have considered it prudent for the present to allow a limited number for this duty; my proposal is, with this exception, to dispense with the entire of the present establishment of foot line guards and horse patrols.

9. The tabular statement will show that I have provided for the more efficient conservancy of the lines by increasing the number and pay of inspectors, and by appointing a sufficiency of native artificers to admit of one being stationed at every telegraph office in India, with 10 additional to provide for casualties. Under the present arrangements the line guards and horse patrols are placed under the orders of the inspector in charge of the portions of line on which they are employed. By the proposed plan the new class of mounted line guards will be under the immediate orders of the assistant in charge of each office, who alone can know when an interruption occurs. They will reside in the office and will be prepared to proceed on the line immediately an interruption becomes known; and as the average interval between office is 70 miles, the new line guards, who will be sent from each end of the line to restore communication, should, under the most unfavourable circumstance, viz., that of the interruption occurring in the centre of the interrupted section, be able to do so on the day the interruption takes place, or early on the following day should the interruption have commenced late on the previous afternoon.

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10. These new line guards will simply restore communication, obtaining assistance for this purpose, when necessary, from the nearest village. The permanent repairs of whatever nature they may be, will be left to the inspector in charge of the division, who, on return of the artificer to his station, will be immediately informed by the assistant in charge of what has taken place, the position of the accident, and the means used to restore communication by native artificers. The assistants in charge of offices, having the sole control over these new line artificers, will be held responsible for the rapid restoration of communication, but not for the permanent repair of the line, which will remain, as at present, in the hands of the inspectors. * * * * *

11. A reduction of upwards of *Rs.* 1,077. 8. –. monthly is proposed in the establishment of office peons. The number of this class employed is, in most offices, disproportionate to the work to be done; they are also, in many instances, improperly employed as private servants, and are paid a higher rate than is necessary to secure the services of men of their class.

12. I have taken advantage of the reduction of expenditure amounting to *Rs.* 13,459. 13. 6. monthly, to propose an increase to the pay of the signallers and officers in the higher grades. This latter part of the proposal I consider of much importance to the interests of the department. A reference to the rates of pay given in other branches of the public service to officers having duties of similar responsibility, will, I think, satisfy the Government that the remuneration of the superior officers of this department is below the average rates. The office labour and money responsibility of the deputy superintendent of a circle may be judged of from the following particulars respecting the Bengal Circle. That circle comprises 1,728 miles of line with an establishment of 578 persons of all classes, and payments averaging monthly 39,487 rupees, accounts current with persons, involving correspondence of 678 letters sent and received during the same period. The length of line and, approximately, the proportional labour and responsibility devolving on the deputy superintendents of the other circles is shown in the margin. Under the existing scale of salaries, the highest pay such officers can receive is 500 rupees per mensem.

	Miles of Line.	Persons Employed.
Punjab - -	1,532	300
Bombay - -	1,287	344
East Coast - -	1,180	352
Central India -	1,174	309
Madras - -	1,030	377
Indore - -	735	153
Scinde - - -	640	172
Dacca - - -	628	220
Pegu - - -	480	148
South-east Coast -	152	20
Total - -	8,838	2,395

13. The pay of the various grades below that of deputy superintendent also appears to me to require increase, especially in the lowest grade, viz., that of third class inspector, which includes several Morse assistants, in which the pay is 100 rupees monthly, the amount these assistants drew on landing in India 4½ years ago. Such pay does not permit of anything being economised to meet the heavy expenses of a sick furlough to England, and even scarcely permits respectable existence in India.

14. The joint effect of the indifferent prospect offered by the higher grades, and of the insufficient pay of some of the lower grades, has, I believe, been to deprive the department of many good men,—25 per cent. of the total number of Morse assistants sent out from England having already resigned, some to return home, but the greater portion to take other appointments in India, and there are others still in the department who, to my knowledge wait a favourable opportunity for leaving it. This tendency to seek employment elsewhere would be lessened and higher efficiency secured were there a prospect for deserving men eventually to rise to a liberally paid appointment, even though the prospect of doing so were distant. The scale I have prepared will, I consider, meet this want.

15. The scheme also embraces a new nomenclature. It is proposed to style the present " Superintendents of Divisions " " Directors," and the present " Deputy Superintendents of Circles " " Superintendents." In the origin of the department, when its head was termed " Superintendent," there was fitness in calling the officers next to him in rank, and who then had charge of circles, " Deputy Superintendents." Since the alteration in the title of the head of the deparment to " Director General," and the introduction of a grade intermediate, and, like the head of the department, without executive charge, these latter have become the deputies of the Director General, and, I think, may appropriately be termed " Directors." The officers in executive charge of circles in no respect act as Deputies to the present Superintendents, indeed while there are 10 of the former there are three only of the latter. I consider, therefore, that even were the designation " Superintendent " retained for the three officers in charge of divisions, that of the Deputy Superintendents would still be an inappropriate designation for the chief officers of circles. The former I therefore propose terming " Directors," and the latter " Superintendents." The officers next below the Superintendents of Circles being their personal assistants, will be appropriately termed Assistant Superintendents. In the grades of Inspectors the nomenclature has been simplified, the terms 1st Class, 2d Class A, 2d Class B, and 3d Class Inspectors, having been changed into 1st, 2d, 3d, and 4th Inspectors.

16. The proposed arrangements of an assistant to every Deputy Superintendent is, I consider, a most important feature of my scheme. The deputy or his assistant should be at all times on the line inspecting the various offices, and the arrangements of the line officers; and I believe the present inability of the Deputy Superintendents to do this to be one of the chief causes of the frequent bad working of the lines. At present, the time of

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of Deputy Superintendents is exclusively occupied in their offices, and a hurried tour, not always once a year, over a limited portion of the lines is the utmost they can devote to the important duty of inspection; but with the aid of an assistant, whose duty will be exclusively to assist the Deputy Superintendent, the latter will be able to exercise considerably more supervision over his offices than has hitherto been the case. He will then be able to acquaint himself with the character of his subordinates; check irregularities in his circle; insure a more constant vigilance over the lines; and thereby considerably lessen the chances of interruption.

17. The scale proposed gives two Superintendents, in excess of the number necessary to give one to each circle; one of these I propose shall be the personal assistant to the Director General, and the other the Superintendent of Stores. There are besides, three extra Superintendents; the duties I would propose for whom would be to fill temporary vacancies in the higher grades, to take charge of the important offices of Complaint, Fault, and Cash Collection examination, and to furnish a special officer for construction, when such is in progress, or for any other special duties that may be required, or for any experiments the Director General may find it in the interest of the Department to make.

18. I do not propose to increase salaries immediately to the full rates suggested, thinking it better that increases should be progressive. The result will be to reduce the increase of expenditure shown on the present scale by about 2,000 rupees monthly during the present year, making the net saving accruing to Government, by the proposal, of *Rs.* 4,905. 5. 6., instead of *Rs.* 2,906. 5. 6., as shown in para. 1.

19. Some explanation seems desirable respecting the manner in which I have arrived at the numbers proposed for the various grades. In this I have been to a considerable extent controlled by what I found existing. The grades of Inspectors have been arranged so as to include in the 4th class all assistants in charge of offices on salaries exceeding 120 rupees a month, and all Morse assistants, several of whom are, as already stated, drawing 100 rupees monthly. Again, in the grade of signallers, it was, as a rule, necessary so to arrange the numbers of the grades as to bring all who might be drawing salaries intermediate between two consecutive rates into the higher of the two rates; perhaps an example will place this in a clearer light. The second and third grades of pay proposed for the Signalling Branch are 100 rupees and 80 rupees. The grade at 100 rupees pay will comprise 30 persons, of whom 17 are now drawing 100 rupees; two, 99 rupees; one, 96 rupees; three, 91 rupees; three, 90 rupees; also, two drawing 80 rupees, one drawing 79 rupees, and one drawing 76 rupees. Similarly, the proposed grade on 70 rupees will also comprise 30 persons, of whom seven are now drawing 74 rupees; this being the only instance, however, of persons being included in a grade the pay of which is under what they are already receiving.

20. In this case the excess must be continued to them as a personal allowance until their turn for promotion to a higher grade arrives. The remaining persons included in the 70-rupee grade are, 20 already drawing 64 rupees, one drawing 61 rupees, and three drawing 60 rupees. For further particulars, I refer you to the Tabular Statement.

21. All promotions in the higher grades of the Department, consequent on the approval of this scheme, should, as at present, be in the hands of Government; but to avoid the great inconvenience that has during the present year been felt from the necessity of referring to Government all minor departmental changes, I would suggest that it may be competent for the Director General to make any promotion or changes below the grade of Inspectors he may consider necessary, without further reference, provided that such are within the sanctioned limit; and that a copy of his departmental order may be accepted as sufficient authority for such changes by the Audit Department.

22. I believe that further retrenchments are still practicable, especially under the head of "Cable Guards" and "Office Servants;" but without more satisfactory data to guide me than I have at present, I have hesitated to make the reductions I could desire.

23. The present alteration in designations have stopped short with the grade of 4th Class Inspectors; but I intend in a future letter to suggest alterations in the nomenclature of the Signalling Branch of the Department, and to revise the "Office allowance," which in many instances admit of considerable reduction, and the appointment of assistants to the present assistants in charge of offices, on the same principle as that of the assistants to the officers in charge of circles. These assistants will be selected from the present establishment of signallers, and remunerated from the savings effected in the revision of the "Office allowance." This arrangement will admit of a responsible person being constantly on duty in signal offices, which under existing circumstances is physically impossible, the offices being open day and night throughout the year, and having but one responsible person in charge.

24. From the materials which it was necessary to collect to mature this scheme of reorganization, it will be easy to prepare lists of the establishments proper for the various signal offices, which will be done on receipt of the Government approval, modified or otherwise, of these proposals.

TABULAR STATEMENT.

Extract from Home Department, Government of India. No.	Date.	Office to which the proposition refers.	NATURE OF CHANGE. Present Scale.	Rs. a. p.	Rs. a. p.	Proposed Scale.	Rs.	Rs. a. p.	Rs. a. p.	PROPOSITION, PERMANENT. Increase per Month. Rs. a. p.	Decrease per Month. Rs. a. p.	Grounds of Proposition.	Orders of the Government of India. Home Department. Remarks.	Financial Department. Remarks.	Orders.
			1 Director General	3,000 – –	3,000 – –	1 Director General	-	-	3,000 – –	—	—				
			1 Superintendent of Division	600 – –	600 – –	1 Director, 1st Class	-	-	1,000 – –	400 – –	- -	*See* paras. 11 and 12 of accompanying letter, No. 1,263, of 20th August 1861.			
						2 Directors, 2d Class	at 800	-	1,600 – –	600 – –					
			2 Superintendents of Division at 500	1,000 – –	1,000 – –							Provides for a superintendent for each of the 10 circles, for an assistant to each of the three directors, and assistant for the director general, and a store superintendent.			
			3 Deputy Superintendents at 500	1,500 – –		1 First Class Superintendent	at 700	700 – –							
			6 Deputy Superintendents at 400	2,400 – –		2 Second Class Superintendents	,, 600	1,200 – –							
			1 Deputy Superintendent at 100	100 – –	4,000 – –	4 Third Class Superintendents	,, 500	2,000 – –	- -	- -	- -	The present rate of pay is considered inadequate to the responsible nature of the duties, and also when viewed in comparison with similar appointments in other departments under Government. *See* paras. 11 and 12 of accompanying letter, No. 1263, of 20th August 1861.			
						5 Fourth Class Superintendents	,, 400	2,000 – –							
			1 Assistant Deputy Superintendent at 350	350 – –		3 Extra Superintendents	,, 350	1,050 – –	6,950 – –	2,950 – –					
			5 Assistant Deputy Superintendents at 300	1,500 – –	1,850 – –										
			17 First Class Inspectors at 250	4,250 – –	4,250 – –	10 Assistant Superintendents	at 300	- -	3,000 – –	1,150 – –	- -	To admit of each superintendent of circle having an assistant; by this plan, either one or the other can be constantly superintending the arrangement on the lines. *See* para. 10 of accompanying letter, No. 1263, of the 20th August 1861.			
			12 Second Class Inspectors, 1st grade, at 200	2,400 – –		20 First Class Inspectors	at 250	- -	5,000 – –	750 – –	- -	To provide increased efficiency for the lines. *See* para. 8 of accompanying letter, No. 1263, dated 20th August 1861.			
			20 Second Class Inspectors, 2d grade, at 150	3,000 – –	5,400 – –	30 Second Class Inspectors	,, 200	- -	6,000 – –	600 – –					
						40 Third Class Inspectors	,, 150		7,000 – –	3,400 – –					
						10 Fourth Class Inspectors	,, 100								
			36 Third Class Inspectors at 100	3,600 – –	3,600 – –	129									
			105	Rs.	23,700 – –				33,550 – –	9,850 – –					

Signallers and Assistants:					Signallers and Assistants:					
		Rs. a. p.								
1	at	180 – –	180 – –		20—120+ 5—60=2,400+300=2,700	- -	- -	- -	- -	It is considered that the present pay of the establishment should be improved. *See* para. 11 of accompanying letter, No. 1263 of 20th August. The rate shown for 160 signallers are intended for natives, being the half rate of the corresponding grades of European and East Indian signallers.
2	„	150 – –	300 – –							
8	„	130 – –	1,040 – –		30—100+ 7—50=3,000+350=3,350					
1	„	124 – –	124 – –							
1	„	120 – –	120 – –							
12	„	105 – –	1,260 – –		30— 80+ 8—40=2,400+320=2,720					
28	„	100 – –	2,800 – –							
2	„	99 – –	198 – –		40— 70+10—35=2,800+350=3,150					
1	„	96 – –	96 – –							
3	„	91 – –	273 – –		60— 60+10—30=3,600+300=3,900					
7	„	90 – –	630 – –							
1	„	84 – –	84 – –							
1	„	81 – –	81 – –		120— 50+30—25=6,000+750=6,750					
13	„	80 – –	1,040 – –							
2	„	79 – –	158 – –		120— 40+30—20=4,800+600=5,400					
5	„	76 – –	380 – –							
22	„	75 – –	1,650 – –							
12	„	74 – –	888 – –		120— 35+30—17=4,200+525=4,725					
20	„	70 – –	1,400 – –							
2	„	66 – –	132 – –		120— 30+30—15=3,600+450=4,050					
6	„	65 – –	390 – –							
2	„	64 – –	128 – –							
1	„	61 – –	61 – –							
8	„	60 – –	480 – –		660+160					
1	„	56 – –	56 – –							
7	„	55 – –	385 – –							
4	„	54 – –	216 – –							
5	„	52 – –	260 – –							
2	„	51 – –	102 – –							
128	„	50 – –	6,400 – –							
2	„	49 – –	98 – –							
4	„	46 – –	184 – –							
4	„	45 – –	180 – –							
3	„	41 – –	123 – –							
115	„	40 – –	4,600 – –							
1	„	37 – –	37 – –							
14	„	35 – –	490 – –							
1	„	31 – –	31 – –							
203	„	30 – –	6,090 – –							
1	„	27 – –	27 – –							
2	„	26 – –	52 – –							
27	„	25 – –	675 – –							
15	„	24 – –	360 – –							
12	„	21 – –	252 – –							
18	„	20 – –	360 – –							
31	„	16 – –	496 – –							
1	„	17 8 –	17 8 –							
30	„	15 – –	450 – –							
1	„	11 – –	11 – –							
10	„	10 – –	100 – –							
803				35,945 8 –	949	- -	36,745 – –	799 8 –		
Carried forward - - - Rs.				59,645 8 –	Carried forward - - - Rs.		70,295 – –	10,649 8 –		

TABULAR STATEMENT—*continued.*

Extract from Home Department, Government of India.		Office to which the Proposition refers.	NATURE OF CHANGE.						PROPOSITION, PERMANENT.		Grounds of Proposition.	Orders of the Government of India.		
No.	Date.		Present Scale.			Proposed Scale.			Increase per Month.	Decrease per Month.		Home Department. Remarks.	Financial Department. Remarks.	Orders.
				Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.				
			Brought forward - -	- - -	59,645 8 –	Brought forward - - -	- -	70,295 – –	10,649 8 –					
			Artificers and Assistant Artificers, including Horse Allowance.			Native Artificers, including Horse Allowance:								
			Rs. a. p.			Rs.								
			1 at 115 – –	115 – –		10 Native artificers - at 50	500 – –							
			5 ,, 90 – –	450 – –										
			13 ,, 85 – –	1,105 – –		10 Ditto ditto - - ,, 40	400 – –	- -	- -	- -	*See* paragraph 8 of accompanying Letter, No. 1263 of the 20th August 1861.			
			18 ,, 83 12 –	1,508 5 6										
			58 ,, 65 – –	3,770 – –										
			1 ,, 60 – –	60 – –										
			13 ,, 55 – –	715 – –										
			11 ,, 50 – –	550 – –		140 Ditto ditto - - ,, 30	4,200 – –							
			9 ,, 45 – –	405 – –										
			17 ,, 40 – –	480 – –										
			2 ,, 35 – –	70 – –		10 Line Guards for the Arracan Mountains - ,, 8	80 – –	- -	- -	- -	Ditto - - - ditto.			
			4 ,, 25 – –	100 – –										
			7 ,, 20 – –	140 – –		170								
			15 ,, 16 – –	240 – –										
			30 ,, 15 – –	450 – –										
			3 ,, 12 – –	36 – –										
			8 ,, 10 – –	80 – –										
			215	10,474 5 6										
			Horse Patrols and Line Guards, including Horse Allowance to the former.											
			Rs. s. p.											
			51 at 40 – –	2,040 – –										
			1 ,, 30 – –	30 – –										
			1 ,, 25 – –	25 – –										
			5 ,, 20 – –	100 – –										
			4 ,, 16 – –	64 – –										
			22 ,, 15 – –	330 – –										
			12 ,, 12 – –	144 – –										
			51 ,, 10 – –	510 – –										
			3 ,, 9 – –	27 – –										
			33 ,, 8 – –	264 – –										
			52 ,, 7 – –	364 – –										
			66 ,, 6 – –	396 – –										

2 ,, 5 8 –	11 – –							
167 ,, 5 – –	835 – –							
42 ,, 4 – –	168 – –							
512	5,308 – –	15,782 5 6			5,180 – –	– –	10,602 5 6	
Inspectors' Peons:			Inspectors' Peons: Rs. a. p.					
1 at 16 – –	16 – –		1 at - - 10 – –	10 – –	– –	– –	– –	To allow of one Peon to each Inspector employed on line duties.
1 ,, 10 – –	10 – –		10 ,, - - 8 – –	80 – –				
13 ,, 8 – –	104 – –		40 ,, - - 6 – –	240 – –				
3 ,, 7 – –	21 – –		24 ,, - - 5 – –	120 – –				
38 ,, 6 – –	228 – –							
22 ,, 5 – –	110 – –							
3 ,, 4 – –	12 – –							
81		501 – –	75		450 – –	– –	51 – –	
Cable Guards:			Cable Guards:					
4 at 10 – –	40 – –		14 at - - 8 – –	112 – –	– –	– –	– –	The increase is in accordance with the suggestion of Deputy Superintendent. It may hereafter admit of decrease.
6 ,, 8 – –	48 – –		7 ,, - - 6 – –	42 – –				
5 ,, 7 – –	35 – –		32 ,, - - 5 – –	160 – –				
17 ,, 6 – –	102 – –		8 ,, - - 4 – –	32 – –				
15 ,, 5 – –	75 – –							
8 ,, 4 – –	32 – –							
55		332 – –	61		346 – –	14 – –		
Office Peons:			Office Peons:					
3 at 15 – –	45 – –		20 at - - 10 – –	200 – –	– –	– –	–	The number and pay is in excess of the necessities of the department. *See* paragraph 10 of accompanying letter No. 1263 of the 20th August 1861.
1 ,, 12 – –	12 – –		7 ,, - - 8 – –	56 – –				
1 ,, 10 8 –	10 8 –		21 ,, - - 7 – –	147 – –				
41 ,, 10 – –	410 – –		32 ,, - - 6 8 –	208 – –				
62 ,, 8 – –	496 – –		65 ,, - - 6 – –	390 – –				
56 ,, 7 – –	392 – –		220 ,, - - 5 – –	1,100 – –				
31 ,, 6 8 –	201 8 –							
111 ,, 6 – –	666 – –							
172 ,, 5 – –	860 – –							
15 ,, 4 8 –	67 8 –							
3 ,, 4 – –	12 – –							
2 ,, 3 – –	6 – –							
498		3,178 8 –	365		2,101 – –	– –	1,077 8 –	
Office Bearers:			Office Bearers:					
2 at 8 – –	16 – –		1 at - - 8 – –	8 – –	– –	– –	– –	- - - Ditto.
17 ,, 7 – –	119 – –		1 ,, - - 6 – –	6 – –				
17 ,, 6 – –	102 – –		17 ,, - - 5 – –	85 – –				
18 ,, 5 – –	90 – –		1 ,, - - 4 – –	4 – –				
2 ,, 4 – –	8 – –							
56		335 – –	20		103 – –	– –	232 – –	
Carried forward - - - Rs.		79,774 5 6	Carried forward - - - Rs.		78,475 – –	10,663 8 –	11,962 13 6	

TABULAR STATEMENT—*continued.*

Extract from Home Department Government of India. No.	Extract from Home Department Government of India. Date.	Office to which the Proposition refers.	NATURE OF CHANGE. Present Scale.			NATURE OF CHANGE. Proposed Scale.			PROPOSITION, PERMANENT. Increase per Month.	PROPOSITION, PERMANENT. Decrease per Month.	Grounds of Proposition.	Orders of the Government of India. Home Department. Remarks.	Orders of the Government of India. Financial Department. Remarks.	Orders of the Government of India. Financial Department. Orders.
				Rs. a. p.	*Rs. a. p.*		*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*				
			Brought forward - -	- -	79,774 5 6	Brought forward - - -	- -	78,475 – –	10,663 8 –	11,962 13 6				
			Bheestees:			Bheestees:								
			Rs. a. p.			*Rs. a. p.*								
			1 at 15 – –	15 – –		2 at - - - 12 – –	24 – –							
			1 ,, 13 – –	13 – –		4 ,, - - - 8 – –	32 – –							
			1 ,, 12 – –	12 – –		2 ,, - - - 6 – –	12 – –							
			3 ,, 10 – –	30 – –		4 ,, - - - 5 – –	20 – –							
			5 ,, 8 – –	40 – –		71 ,, - - - 4 – –	284 – –							
			9 ,, 6 – –	54 – –		6 ,, - - - 3 – –	18 – –							
			41 ,, 5 – –	205 – –		1 ,, - - - 2 8 –	2 8 –							
			28 ,, 4 – –	112 – –		17 ,, - - - 2 – –	34 – –							
			8 ,, 3 – –	24 – –										
			10 ,, 2 – –	20 – –										
			1 ,, 2 8 –	2 8 –										
			108		527 8 –	107		426 8 –	- -	101 – –				
			Sweepers:			Sweepers:								
			2 at 12 – –	24 – –		2 at - - - 8 – –	16 – –							
			1 ,, 10 – –	10 – –		2 ,, - - - 6 – –	12 – –							
			3 ,, 8 – –	24 – –		3 ,, - - - 5 – –	15 – –							
			9 ,, 6 – –	54 – –		69 ,, - - - 4 – –	276 – –							
			36 ,, 5 – –	180 – –		11 ,, - - - 3 – –	33 – –							
			34 ,, 4 – –	136 – –		2 ,, - - - 2 8 –	5 – –							
			11 ,, 3 – –	33 – –		37 ,, - - - 2 – –	74 – –							
			7 ,, 2 8 –	17 8 –		5 ,, - - - 1 8 –	7 8 –							
			23 ,, 2 – –	46 – –										
			7 ,, 1 8 –	10 8 –										
			133		535 – –	131		438 8 –	- -	96 8 –				
			Store Lascars:			Store Lascars:								
			1 at 7 – –	7 – –		1 at - - - 7 – –	7 – –							
			10 ,, 6 – –	60 – –		10 ,, - - - 6 – –	60 – –							
			1 ,, 5 – –	5 – –		1 ,, - - - 5 – –	5 – –							
			12		72 – –	12		72 – –						

Tent Lascars:			Tent Lascars:					
2 at 6 - -	12 - -	12 - -	- - - nil.				12 - -	Considered unnecessary.
Chowkeedars and Durwans:			Chowkeedars and Durwans:					
3 at 7 - -	21 - -		3 at - - - 7 - -	21 - -				
3 " 6 - -	18 - -		3 " - - 6 - -	18 - -				
3 " 5 - -	15 - -							
9		54 - -	6		39 - -	- -	15 - -	Unnecessary, except at the three Presidency Offices, where provision has been made for two at each.
Bill Collectors:			Bill Collector:					
1 at 10 - -	10 - -		1 at - - - 10 - -	10 - -				
1 " 8 - -	8 - -							
2		18 - -	1		10 - -	- -	8 - -	One man unnecessary.
Boatmen:			Boatmen:					As these men are all employed on the river Hooghly, it is desirable to have an uniform rate of pay. This has been provided for; the crews for six boats consisting of one Manjee and four men to each boat. There have been reductions in the number of men employed at the various stations, but the reduction has been absorbed by providing a crew for a boat that is considered necessary for the inspector in charge of the river lines.
1 at 8 - -	8 - -							
3 " 7 - -	21 - -							
5 " 6 - -	30 - -		6 at - - - 7 - -	42 - -	- -	- -	- -	
17 " 5 - -	85 - -		28 " - - - 5 - -	140 - -				
4 " 4 12 -	19 - -							
4 " 4 - -	16 - -							
34		179 - -	34		182 - -	3 - -		
Flag Staff and Watchmen:			Flag Staff and Watchmen:					
1 at 8 - -	8 - -		7 at - - - 6 - -	42 - -				
1 " 7 - -	7 - -		7 " - - - 5 - -	35 - -				
9 " 6 - -	54 - -							
3 " 5 - -	15 - -							
14		84 - -	14		77 - -	- -	7 - -	
Packers:			Packers:					
2 at 10 - -	20 - -		2 at - - - 10 - -	20 - -				
1 " 8 - -	8 - -		1 " - - - 8 - -	8 - -				
1 " 7 - -	7 - -		1 " - - - 7 - -	7 - -				
4		35 - -	4		35 - -			
Batterymen:			Battery men:					
1 at 7 - -	7 - -		- - - nil.					
1 " 4 - -	4 - -							
2		11 - -					11 - -	Unnecessary. The work is performed by the office peons.
Carried forward - - Rs.		81,301 13 6	Carried forward - - - Rs.		79,755 - -	10,666 8 -	12,213 5 6	

TABULAR STATEMENT—*continued.*

Extract from Home Department, Government of India.		Office to which the Proposition refers.	NATURE OF CHANGE.							PROPOSITION, PERMANENT.		Grounds of Proposition.	Orders of the Government of India.		
			Present Scale.			Proposed Scale.				Increase per Month.	Decrease per Month.		Home Department.	Financial Department.	
No.	Date.			Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Remarks.	Remarks.	Orders.
			Brought forward - -	- -	81,301 13 6	Brought forward - - -		- -	79,755 – –	10,666 8 –	12,213 5 6				
			Auditors, Accountants, Clerks, and Writers employed in Director General's, Superintendents' and Deputy Superintendents' Offices; also in the Complaint, Stores, Audit Offices and Signal Offices, and by Inspectors:			One Director General's Office Establishment, as follows:	Rs. a. p.								
			Rs. a. p.			1 Head clerk - -	150 – –								
			1 at 250 – –	250 – –		1 Correspondence clerk	90 – –								
			1 ,, 100 – –	100 – –		1 Examiner and indexer - -	60 – –								
			1 ,, 125 – –	125 – –		1 Despatch and copying clerk - -	30 – –								
			8 ,, 100 – –	800 – –		2 Despatch and copying clerks, at 25 -	50 – –								
			2 ,, 90 – –	180 – –		2 Despatch and copying clerks, at 20 -	40 – –								
			1 ,, 80 – –	80 – –		8		420 – –							
			5 ,, 75 – –	375 – –		Three Directors' Office Establishments in all, as follows:									
			1 ,, 70 – –	70 – –		1 Head clerk - -	100 – –								
			1 ,, 65 – –	65 – –		2 Head clerks, at 80 -	160 – –								
			7 ,, 60 – –	420 – –		3 Correspondence clerks, at 50 each	150 – –								
			15 ,, 50 – –	750 – –		3 Assistant clerks, at 30 each - -	90 – –								
			18 ,, 45 – –	810 – –		9		500 – –							
			18 ,, 40 – –	720 – –		Three First Class Circle Superintendents' Office Establishments each, as follows:									
			1 ,, 37 8 –	37 8 –		1 Accountant - -	100 – –								
			7 ,, 35 – –	245 – –		1 Assistant accountant	50 – –								
			23 ,, 30 – –	690 – –		1 Bill examiner -	40 – –								
			1 ,, 28 – –	28 – –		1 Copying clerk -	25 – –								
			31 ,, 25 – –	775 – –		1 Assistant bill examiner - -	20 – –								
			1 ,, 21 – –	21 – –		1 Clerk - - -	15 – –								
			36 ,, 20 – –	720 – –		1 Correspondence clerk	60 – –								
			27 ,, 16 – –	432 – –											
			16 ,, 15 – –	240 – –											
			1 ,, 13 – –	13 – –											
			6 ,, 12 – –	72 – –											
			1 ,, 11 – –	11 – –											
			8 ,, 10 – –	80 – –											
			1 ,, 6 – –	6 – –											
			239	8,115 8 –											

			1 Clerk - - -	35 – –				
			1 Ditto - - -	30 – –				
			1 Ditto - - -	12 – –				
			10	387 – –				
			×3	×3				
			30		1,161 – –			
			Four Second Class Superintendents' Office Establishments each, as follows:					
			1 Accountant - -	100 – –				
			1 Assistant accountant	40 – –				
			1 Bill examiner -	30 – –				
			1 Copying clerk -	20 – –				
			1 Correspondence clerk	50 – –				
			1 Clerk - - -	30 – –				
			1 Ditto - - -	25 – –				
			7	295 – –				
			×4	×4				
			28		1,180 – –			
			Three Third Class Circle Superintendents' Office Establishments each, as follows:					
			1 Accountant - -	100 – –				
			1 Assistant accountant	30 – –				
			1 Correspondence clerk	40 – –				
			1 Clerk - - -	25 – –				
			1 Ditto - - -	20 – –				
			5	215 – –				
			×3	×3				
			15		645 – –			
			Calcutta Signal Office Establishment:					
			1 Receiving clerk -	50 – –				
			1 Ditto - - -	40 – –				
			1 Ditto - - -	30 – –				
			1 Ditto - - -	25 – –				
			1 Ditto - - -	20 – –				
			2 Copying clerks, at 40 each - -	80 – –				
			1 Despatching clerk -	35 – –				
			1 Ditto - - -	30 – –				
			1 Accountant - -	35 – –				
			1 Ditto - - -	30 – –				
			11		375 – –			
Carried forward - *Rs.*	8,115 8 –	81,301 13 6	Carried forward - - - *Rs.*		4,281 – –	79,755 – –	10,666 8 –	12,213 5 6

TABULAR STATEMENT—*continued.*

Extract from Home Department, Government of India. No.	Date.	Office to which the Proposition refers.	NATURE OF CHANGE. Present Scale.			NATURE OF CHANGE. Proposed Scale.				PROPOSITION, PERMANENT. Increase per Month.	PROPOSITION, PERMANENT. Decrease per Month.	Grounds of Proposition.	Orders of the Government of India. Home Department. Remarks.	Orders of the Government of India. Financial Department. Remarks.	Orders of the Government of India. Financial Department. Orders.
				Rs. a. p.	*Rs. a. p.*		*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*				
			Brought forward - -	8,115 8 –	81,301 13 6	Brought forward - - *Rs.*		4,281 – –	79,755 – –	10,666 8 –	12,213 5 6				
						Bombay Signal Office Establishment:									
						1 Receiving clerk -	40 – –								
						1 Ditto - - -	35 – –								
						1 Ditto - - -	30 – –								
						1 Ditto - - -	25 – –								
						2 Copying clerks, at 40 each - -	80 – –								
						1 Despatching clerk -	35 – –								
						1 Ditto - - -	30 – –								
						1 Accountant - -	35 – –								
						1 Ditto - - -	20 – –								
						10		330 – –							
						Madras Signal Office Establishment:									
						1 Receiving clerk -	35 – –								
						1 Ditto - - -	30 – –								
						1 Ditto - - -	25 – –								
						1 Copying clerk -	35 – –								
						1 Ditto - - -	30 – –								
						1 Ditto - - -	25 – –								
						1 Ditto - - -	20 – –								
						1 Accountant - -	35 – –								
						1 Ditto - - -	20 – –								
						9		255 – –							
						4 Writers for each of the following circles: Bengal, Indore, Madras and Central India, at 30 each - - -	120 – –								
						20 Writers for 1st class inspectors, at 30 -	600 – –								
						24		720 – –							

			Calcutta Store Department:						
			1 Writer at 40 -	40 - -					
			1 Ditto „ 25 -	25 - -					
			2 Writers at 30 -	40 - -					
			1 Writer „ 16 -	16 - -					
			5		121 - -				
			Cash Checkers:						
			1 at 40 -	40 - -					
			6 „ 20 -	120 - -					
			7		160 - -				
			Complaint Branch:						
			1 at 70 -	70 - -					
			2 „ 30 -	60 - -					
			1 „ 25 -	25 - -					
			1 „ 25 -	25 - -					
			2 „ 20 -	40 - -					
			1 „ 20 -	20 - -					
			8		240 - -				
			Audit Branch:						
			1 Auditor -	500 - -					
			1 Clerk -	60 - -					
			1 Ditto -	35 - -					
			1 Ditto -	30 - -					
			3 Clerks at 25 -	75 - -					
			3 Ditto at 20 -	60 - -					
			1 Clerk at 40 -	40 - -					
			2 Clerks at 15 -	30 - -					
			13		830 - -				
			Store Department:						
			1 Sircar at 50 -	50 - -					
			1 Ditto at 16 -	16 - -					
		8,115 8 -	2		66 - -	7,003 - -	- -	1,112 8 -	Proposed Establishment is considered sufficient for the wants of the Department.
Office Duftries:			**Office Duftries:**						
1 at 10 - -	10 - -		1 at 10 -	10 - -					
3 „ 8 - -	24 - -		7 „ 7 -	49 - -					
4 „ 7 - -	28 - -		5 „ 6 -	30 - -					
5 „ 6 - -	30 - -		1 „ 5 -	5 - -					
1 „ 5 - -	5 - -								
14		97 - -	14		- -	94 - -	- -	3 - -	Rates of pay considered too high.
Carried forward - - - *Rs.*		89,514 5 6	Carried forward - - - *Rs.*			86,852 - -	10,666 8 -	13,328 13 6	

TABULAR STATEMENT—*continued.*

Extract from Home Department, Government of India.		Office to which the Proposition refers.	NATURE OF CHANGE.						PROPOSITION, PERMANENT.		Grounds of Proposition.	Orders of the Government of India.		
No.	Date.		Present Scale.			Proposed Scale.			Increase per Month.	Decrease per Month.		Home Department. Remarks.	Financial Department. Remarks.	Financial Department. Orders.
				Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.				
			Brought forward - -	- -	89,514 5 6	Brought forward - - -	- -	86,852 - -	10,666 8 -	13,328 13 6				
			Gardeners: Rs. a. p.			Gardeners: Rs. a. p.								
			1 at 7 - -	7 - -		Nil.								
			5 ,, 6 - -	30 - -										
			3 ,, 5 - -	15 - -										
			7 ,, 4 - -	28 - -										
			1 ,, 2 - -	2 - -										
			17		82 - -	- - - - - -	- -	- -	- -	82 - -	Unnecessary. In cases where gardens have been hitherto kept up, it is considered they should be self-supporting.			
			Woodcutters:			Woodcutters:								
			2 at 4 - -	- -	8 - -	2 - at - 4 - - -	- -	8 - -						
			Horsekeepers and Grass-cutters:			Horse-keepers and Grass-cutters:								
			1 at 12 - -	12 - -		Nil.								
			2 ,, 6 - -	12 - -										
			4 ,, 5 - -	20 - -										
			2 ,, 2 8 -	5 - -										
			9		49 - -	- - - - - -	- -	- -	- -	49 - -	Unnecessary.			
			Lithographers:			Lithographers:								
			2 at 15 - -	30 - -		1 - at - 20 - - 20 - -								
			1 ,, 10 - -	10 - -		2 - ,, - 15 - - 30 - -								
			1 ,, 5 - -	5 - -		8 - ,, - 12 - - 96 - -								
			4		45 - -	11	- -	146 - -	101 - -					
			Printing Department at Calcutta and Madras: Rs.			Printing Department at Calcutta only: Rs.								
			1 Superintendent - at 100	100 - -		1 Superintendent, at 100 - 100								
			1 Foreman - ,, 65	65 - -		1 Compositor - ,, 40 - 40								
			1 Assistant - ,, 40	40 - -		1 Ditto - - - ,, 30 - 30								
			1 Compositor ,, 30	30 - -		1 Ditto - - - ,, 27 - 27								
			1 Ditto - - ,, 27	27 - -		1 Ditto - - - ,, 25 - 25								
			1 Ditto - - ,, 25	25 - -		1 Ditto - - - ,, 16 - 16								
			1 Ditto - - ,, 20	20 - -		1 Ditto - - - ,, 12 - 12								
			1 Ditto - - ,, 16	16 - -		1 Ditto - - - ,, 10 - 10								
			1 Ditto - - ,, 12	12 - -		1 Distributor - ,, 7 - 7								

1 Compositor, at 10	10 – –		1 Copyholder - at 16	16				
1 Ditto - - „ 8	8 – –		1 Pressman - - „ 11	11				
1 Ditto - - „ 7	7 – –		3 Ditto - - - „ 10	30				
1 Distributor „ 7	7 – –		4 Inkers - - - „ 6	24				
1 Copyholder „ 16	16 – –		3 Boys - - - „ 4	12				
1 Pressman - „ 11	11 – –		1 Duftry - - - „ 8	8				
7 Ditto - - „ 10	70 – –		1 Ditto - - - „ 6	6				
1 Ditto - - „ 9	9 – –		1 Jemadar Delivery Peon - „ 10	10				
1 Ditto - - „ 8	8 – –		1 Peon - - - „ 8	8				
1 Inker - - „ 7	7 – –		13 Ditto - - - „ 7	91				
9 Ditto - - „ 6	54 – –		1 Writer - - - „ 20	20				
6 Boys - - „ 4	24 – –		1 Type-picker - „ 5	5				
1 Jemadar Pressman „ 12	12 – –		1 Lithograph Pressman - „ 12	12				
41	578 – –		41					
Gazette Delivery Peon in the above:								The Madras printing office is considered unnecessary; that at Calcutta only is required. A lithographer is provided for all circles.
1 Jemadar - at 10	10 – –							
1 Peon - - „ 8	8 – –							
14 Ditto - - „ 7	98 – –							
1 Duftry - - „ 8	8 – –							
2 Ditto - - „ 6	12 – –							
1 Writer - - „ 20	20 – –							
		734 – –		- -	520 – –	- -	214 – –	
20								
TOTAL - - - Rs.		90,432 5 6	TOTAL - - - Rs.		87,526 – –	10,767 8 –	13,673 13 6	

Calcutta, Director General's Office,
20 April 1861.

C. Douglas, Lieutenant Colonel,
Officiating Director General of Telegraphs in India.

ABSTRACT.

SAVINGS:	Rs. a. p.	Rs. a. p.
From European Artificers, Line Guards, and Horse Patrols, after deduction of the cost of the new Line Establishment intended to replace them	10,602 5 6	
„ Inspectors' Peons	51 – –	
„ Office Peons	1,077 8 –	
„ „ Bearers	232 – –	
„ „ Bheesties	101 – –	
„ „ Sweepers	96 8 –	
„ Tent Lascars	12 – –	
„ Chowkeedars and Durwans	15 – –	
„ Bill Collectors	8 – –	
„ Flag-staff and Watchmen	7 – –	
„ Battery-men	11 – –	
„ Writers	1,112 8 –	
„ Du'tries	3 – –	
„ Gardeners	82 – –	
„ Horse-keepers and Grass cutters	49 – –	
„ Printing Offices	214 – –	
TOTAL - - - Rs.		13,673 13 6

PROPOSED INCREASES:	Rs. a. p.	Rs. a. p.
To Establishment—		
2 4th Class Superintendents, at 400	800 – –	
3 Extra Superintendents, at 350	1,050 – –	
4 Assistant Superintendents	1,150 – –	
15 Inspectors	4,750 – –	
17 Signallers	799 8 –	
6 Cable Guards	14 – –	
7 Lithographers	101 – –	
To Present Salaries—		
Superintendent of Division	1,000 – –	
Deputy Superintendents of Circles	1,100 – –	
Boatmen	3 – –	10,767 8 –
Net Savings per Month - - -		2,906 5 6
TOTAL - - - Rs.		13,673 13 6

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Appendix (S).

Return of Collections, in Cash and Stamps, on Service and Private Messages (showing Increase and Decrease on the preceding Year), for 1861-62.

N.B.—This Return does not include Cash received to credit of any Lines other than those belonging to the Government of India, nor the Cash Payments made by Persons in the Department for the Messages they may send on its business nor the *pro formâ* Charges for such of the Messages of the Marine Department as are sent by the River Lines.

CIRCLES.	COLLECTIONS IN 1861-62.			COLLECTIONS IN 1860-61.			NET INCREASE.			NET DECREASE.		
	Service.	Private.	TOTAL.	Service.	Private.	TOTAL.	Service.	Private.	TOTAL.	Service.	Private.	TOTAL.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Bengal - - -	40,692 11 6	1,61,955 14 –	2,02,648 9 6	39,812 – 8	1,46,032 8 3	1,85,844 8 11	880 10 10	15,923 5 9	16,804 – 7	—	—	—
Bombay - -	19,649 9 3	1,50,071 3 6	1,69,720 12 9	16,720 11 9	1,48,410 3 4	1,65,130 15 1	2,928 13 6	1,661 – 2	4,589 13 8	—	—	—
Madras - - -	14,498 10 2	72,228 8 6	86,727 2 8	15,430 15 2	69,673 12 3	85,104 11 5	- - -	2,554 12 3	2,554 12 3	932 5 –	- -	932 5 –
Punjab - - -	28,501 11 –	30,993 9 6	59,495 4 6	23,955 1 3	31,637 15 11	55,593 1 2	4,546 9 9	- - -	4,546 9 9	- -	644 6 5	644 6 5
Central India - -	4,033 13 –	20,055 10 –	24,089 7 –	3,848 12 –	15,141 7 –	18,990 3 –	185 1 –	4,914 3 –	5,099 4 –	—	—	—
Pegu - - -	3,830 3 6	20,577 11 6	24,407 15 –	4,724 – 3	10,643 10 4	15,367 10 7	- - -	9,934 1 2	9,924 1 2	893 12 9	- -	893 12 9
Dacca - - -	808 1 6	7,777 11 –	8,585 12 6	2,113 13 –	3,972 2 9	6,085 15 9	- - -	3,805 8 3	3,805 8 3	1,305 11 6	- -	1,305 11 6
Indore - - -	3,170 3 –	18,239 – –	21,409 3 –	3,807 12 –	24,204 9 –	28,012 5 –	- - -	- - -	- -	637 9 –	5,965 9 –	6,603 2 –
East Coast - -	4,765 3 –	29,716 5 6	34,481 8 6	2,725 2 8	27,827 4 8	30,552 7 4	2,040 – 4	1,889 – 10	3,929 1 2	—	—	—
Sindh - - -	5,488 15 –	12,941 6 6	18,430 5 6	5,869 15 –	12,861 9 –	18,731 8 –	- - -	79 13 6	79 13 6	381 – –	- -	381 – –
South-east Coast -	209 6 –	5,163 2 6	5,372 8 6	164 12 –	3,325 – –	3,489 12 –	44 10 –	1,838 2 6	1,882 12 6	—	—	—
Ceylon* - -	193 – 6	18,862 9 7	19,055 10 1	308 9 8	11,991 11 8	12,300 5 4	- - -	6,870 13 11	6,870 13 11	115 9 2	- -	115 9 2
TOTAL - - Rs.	1,25,841 7 5	5,48,582 12 1	6,74,424 3 6	1,19,481 9 5	5,05,721 14 2	6,25,203 7 7	10,625 13 5	49,470 13 4	60,096 10 9	4,265 15 5	6,609 15 5	10,875 14 10
Total of Net Increase on the preceding Official Year - - - Rs.							6,359 14 –	42,860 13 11	49,220 11 11	—	—	—
Per-centage - - - Rs.							5·32	8·47	7·87			

* Being share due to India by Ceylon.

APPENDIX (T).

STATEMENT showing the RECEIPTS and DISBURSEMENTS on account of Working and Construction Charges of the Department for the Year 1861-62.

CIRCLES, &c.	WORKING ACCOUNT.						
	RECEIPTS.						
	Collections on Messages.				Fines and Savings.	Sale of Unserviceable Stores.	TOTAL.
	Private.	Service.	Telegraph Service.	TOTAL.			
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
General Superintendence	– – –	– – –	– – –	– – –	– – –	– – –	– – –
Store Branch - - -	– – –	– – –	– – –	– – –	– – –	507 10 –	507 10 –
Printing Branch - -	– – –	– – –	– – –	– – –	– – –	– – –	– – –
Bengal - - - -	1,61,955 14 –	40,692 11 6	2,536 15 9	2,05,185 9 3	3,767 1 2	593 5 –	2,09,545 15 5
Punjab - - - -	30,993 9 6	28,501 11 –	1,401 7 6	60,896 12 –	503 2 8	267 14 9	61,667 13 5
Pegu - - - -	20,577 11 6	3,830 3 6	– – –	24,407 15 –	121 10 –	83 12 –	24,613 5 –
Dacca - - - -	7,777 11 –	808 1 6	467 14 6	9,053 11 –	317 8 10	75 13 –	9,447 – 10
Bombay - - - -	1,50,071 3 6	19,649 9 3	1,342 7 –	1,71,063 3 9	840 2 3	1,233 8 7	1,73,136 14 7
Sind - - - -	12,941 6 6	5,488 15 –	697 11 –	19,128 – 6	227 1 1	– – –	19,355 1 7
Indore - - - -	18,239 – –	3,170 3 –	412 2 –	21,821 5 –	415 3 1	823 9 3	23,060 1 4
Madras - - - -	72,228 8 6	14,498 10 2	1,667 2 –	88,394 4 8	308 2 5	125 – –	88,827 7 1
Central India - - -	20,055 10 –	4,033 13 –	650 7 –	24,739 14 –	134 5 –	180 – –	25,054 3 –
East Coast - - -	29,716 5 6	4,765 3 –	880 – –	35,361 8 6	385 6 8	1,135 3 1	36,882 2 3
South-east Coast - -	5,163 2 6	209 6 –	83 – –	5,455 8 6	47 4 –	35 – –	5,537 12 6
Ceylon (a) - - -	18,862 9 7	193 – 6	– – –	19,055 10 1	– – –	– – –	19,055 10 1
TOTAL - - - Rs.	5,48,582 12 1	1,25,841 7 5	10,139 2 9	6,84,563 6 3	7,066 15 2	5,060 11 8	6,96,691 1 1

CIRCLES, &c.	WORKING ACCOUNT—*continued*.					CONSTRUCTION ACCOUNT.			GRAND TOTAL.
	DISBURSEMENTS.					DISBURSEMENTS.			
	Office Salaries.	Office Contingencies.	Line Salaries.	Line Contingencies.	TOTAL.	Construction.	Reconstruction.	TOTAL.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
General Superintendence	48,369 4 –	1,816 15 –	– –	– – –	50,177 3 –	– – –	– –	– –	50,177 3 –
Store Branch - - -	14,844 – –	86,892 4 9	– –	– – –	1,01,736 4 9	27,318 6 8	– –	27,318 6 8	1,29,054 11 5
Printing Branch - -	6,356 8	8,405 12 4	– –	– – –	14,762 5 1	– – –	– –	– –	14,762 5 1
Bengal - - - -	1,36,340 – –	36,818 – –	22,793 – –	15,681 – –	2,11,632 – –	– – –	21,011 – –	21,011 – –	2,32,643 – –
Punjab - - - -	78,434 14 –	9,328 1 7	14,296 14 9	9,874 9 4	1,11,934 7 8	599 2 6	2,174 1 6	2,773 4 –	1,14,707 11 8
Pegu - - - -	40,962 9 9	2,152 – –	22,236 5 6	(b) 28,850 10 –	94,201 9 3	(d) 50,870 12 8	– –	50,870 12 8	1,45,072 5 11
Dacca - - - -	30,816 – 6	13,264 14 1	23,611 14 10	13,776 2 2	81,468 15 7	746 4 –	370 – –	1,116 4 –	82,585 3 7
Bombay - - - -	83,829 3 6	32,084 13 3	23,705 13 –	12,921 7 –	15,254 4 9	– – –	– –	– –	1,52,541 4 9
Sind - - - -	31,806 13 1	6,838 6 9	13,225 6 6	(c) 20,298 4 8	72,168 15 –	– – –	337 14 4	337 14 4	72,506 13 4
Indore - - - -	37,770 9 10	7,050 1 5	17,497 12 6	13,172 8 5	75,491 – 2	– – –	– –	– –	75,491 – 2
Madras - - - -	89,573 9 2	29,988 10 1	38,563 1 –	37,837 – –	1,95,962 4 3	– – –	29,873 2 –	29,873 2 –	2,25,835 6 3
Central India - - -	50,897 – –	17,662 – –	21,217 – –	28,454 – –	1,18,230 – –	2,350 – –	74,350 – –	76,700 – –	1,94,930 – –
East Coast - - -	69,995 1 3	5,785 2 11	22,532 2 2	19,262 1 11	1,17,574 8 3	– – –	9,602 5 5	9,602 5 5	1,27,176 13 8
South-east Coast - -	9,432 2 –	1,189 2 11	5,580 5 5	1,479 9 8	17,681 4 –	– – –	– –	– –	17,681 4 –
Ceylon (a) - - -	(e) —	—	—	—	—	—	—	—	—
TOTAL - - - Rs.	7,29,418 11 10	2,59,276 5 1	2,25,259 11 8	2,01,607 5 2	14,15,562 1 9	81,884 9 10	1,37,718 7 3	2,19,603 1 1	16,35,165 2 10

N.B.—In consequence of the labour which would have been involved in the separate allotment to "Working" and "Construction" of the charges for messages sent by Officers of the Department on its business, it became necessary to include these with the Receipt, and consequently the refunds on audited Bills on account of these messages have similarly been retained in the Disbursements.

(a). Being share due by Ceylon to India.

(b & c). The amounts include the following items—The proportion chargeable to Offices and Lines has not been ascertained; but that chargeable to Offices is, however, believed to be but a small fraction of the whole:—

	PEGU.	SIND.
	Rs. a. p.	Rs. a. p.
Extra Establishments - - - - - - -	3,694 15 –	242 8 –
Travelling Charges - - - - - - - -	3,812 – –	3,427 4 9
Unclassified ditto - - - - - - - -	872 2 7	13,061 12 7
TOTAL - - - Rs.	7,879 1 7	16,731 9 4

(d). The proportion chargeable to Reconstruction has not been ascertained; by much the larger amount is, however, chargeable to Construction.

(e). The charges of the Ceylon Circle have not been shown in this Statement, as they are defrayed by the Colonial Government.

Appendix (V).

Government Telegraph Department.

General Branch, Circular No. 31.

From Major *C. Douglas*, Officiating Director General of Telegrahs in India, to the Assistant in Charge Office; dated Calcutta, the 10th of August 1860.—Reissued the 12th of April 1861.

Inspectors and assistants in charge of offices are hereby directed to classify their Message Drafts as follows :—

Service sent.
,, transit.
,, received.
Service confidential sent.
,, ,, transit.
,, ,, received.
Telegraph sent—(T. S. messages.)
,, transit.
,, received.

Private sent.
,, transit.
,, received.

News sent—(public and mail).
,, transit.
,, received.

These reports will be superscribed "*Message Drafts*" on the cover, and must be accompanied by a list of the number of each class of message, sent in the subjoined form given below, which has been hypothetically filled up for guidance.

Books containing 100 such forms, with counterfoils, will at once be supplied to all offices.

As a distinguishing mark, covers containing "Message Drafts," when not on blue coloured paper, will have a thick diagonal black ink line ruled across them from the upper left to the lower right-hand corner. They will be addressed, "To the Complaint Office, Government Telegraph Department, Calcutta."

By "Confidential Messages" is meant such *Service Messages only* as are headed "*Confidential*" by the sender. All such will be placed in a separate cover, conspicuously marked "*Confidential Message Drafts,*" and addressed to the Officiating Director General of Telegraphs in India, and *not* to the Complaint Office, as in the case of ordinary Message Drafts.

Message Drafts of the Agra Office for the 7th March 1861.

Nature of Messages.	Sent.	Transit.	Received.	Total.	Remarks respecting Confidential Service Messages.
Service - - - - -	11	53	4	48	The four Confidential Service Messages were sent to the address of the Officiating Director General on the 8th of March 1861.
,, (Confidential) - -	1	3	0	4	
Telegraph (T. S.) - - -	14	27	20	61	
Private - - - - -	165	498	77	740	
News (Public and Mail) - -	0	1	1	2	

Assistant in Charge.

N.B.—The original circular should be removed from the Circular Book to make place for this.

General Branch, Circular No. 108.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Assistant in Charge Office; dated Calcutta, the 10th of June 1861.

In view to avoiding the great inconvenience and delay now frequently experienced by the storekeeper, from Morse instruments being sent in for repair with portions either altother missing, or in which parts of others have been substituted for those properly belonging to them, it is directed that instruments, when sent to the storekeeper for repair, shall invariably

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invariably be complete with all broken parts appertaining to them. After receipt of this circular, should any instruments be sent of which portions are deficient, the expense of renewing such missing portions will be charged to the officer sending them in an incomplete state.

Inspectors or assistants in charge of offices are prohibited from altering any connexions, or intermixing any portions of different Morse instruments, without the express leave of superintendents.

The following instances will prove to superintendents the advantage of insisting on these orders being carried out:—

1st.—A Morse instrument was returned into store, in January last, so destroyed by incompetent persons handling it, that it has taken three men 26 days to repair it, at a cost of about 58 rupees.

2d.—During last month two relays, that had been damaged by lightning at Burdwan, were sent in without being meddled with, and the consequence was they were repaired and returned in 60 hours.

Government Telegraph Department.

General Branch, Circular No. 113.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Assistant in Charge Office; dated Calcutta, the 19th of July 1861.

Considerable time is occupied before replies to complaints of delay in transmission of messages can be given, in consequence of the time occupied by the necessary references to the offices to which the delay may have been traced, when it is not known to have been occasioned by interruption.

The only source from which the assistants reply to these references is their office log-book.

To avoid the delay referred to, and to enable the Complaint Department to give early replies to complaints of the nature above described, it is directed that whenever any entry is made in the log referring to an unusual delay in the transmission of messages—caused either by bad working owing to severe weather, or by an interruption either existing, or so recently restored that any accumulation of messages which may have resulted subsequent to the last postal despatch could not have been entirely cleared off, or by delay from mail news or long cipher messages—a copy of *that portion of the log* alluding to such delays must accompany the Message Drafts of the day on which the entry is made.

Government Telegraph Department.

General Branch, Circular No. 115.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Assistant in Charge Office; dated Calcutta, the 6th September 1861.

As an experiment and preparatory to applying to the Government for sanction, the direct line (*viâ* Agra) between Calcutta and Bombay will be cleared once daily, for the transmission of *through* messages in both directions between those towns; the instruments during the transmission of such *through* messages working in W. at the stations of Benares, Agra, and Indore, and in D. at all intermediate stations.

Ere, however, any order of this nature can be carried out, as the same instant of absolute time is represented by very different local times at different places (the differences between the local times at Bombay and Calcutta being 63 minutes), it becomes necessary, in order to avoid confusion, to adopt one arbitrary time as the telegraph time for all India.

The most convenient arbitrary time to adopt is such as will keep the difference between it and the local times generally as small as possible.

The town of Madras, situated, as regards longitude, at a nearly equal distance from Calcutta and Bombay, being the head-quarters of a circle, and having besides a Government Observatory, seems peculiarly fitted to give telegraph time: its local time will therefore, for the future, be taken as the telegraph time for all India.

The differences in local time between Madras and every telegraph station in India is given in the accompanying Table, not that so extensive a Table is necessary for the object under present consideration, but because it is very desirable that the department should have a mode of indicating time clear of ambiguity and of all risk of misunderstanding. To enhance

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enhance the utility and facilitate the application of the Table, the local times corresponding to certain telegraph times are also given. The number of minutes by which the local time of each office is *fast* or *slow* of telegraph time, as shown in the Table, must be noted on the card dial sent to each office with Circular No. 71 of the 28th October last, in the space appropriated for this purpose.

The experiment of through messages will, for the present, be confined to the line between Calcutta and Bombay; and on the result will depend the recommendation or otherwise of its continuance and extension to the lines between Calcutta and Madras, and Madras and Bombay.

The course to be followed in these through messages will be as follows:—

Assuming that a previous trial has corrected the grosser errors in local time, the offices on the line between Calcutta and Bombay will every morning, at 7-55 h. of telegraph time, join over, for correction of clocks, the instruments at the various stations working, as directed in the 1st paragraph; a roll will then be sent along the line from Calcutta to call attention, and will be continued at intervals until Bombay has answered; the stations on the line will now watch for an "attack" from Calcutta, which will be the signal that from the *last* beat of the attack is was 8 h. telegraph time; and should the clock at any station not now show the local time given in the Table as corresponding to 8 h. telegraph time, it must be corrected to do so. True local time is thus secured; but as accident may occasionally lead to a delay in the time-roll, Calcutta will always follow it up by signalling the hour and minute of telegraph time at which the *last* beat of the roll was given. Calcutta will immediately afterwards signal at what hour on that day it is intended that the *through* transmission of telegraph messages shall begin, which for the present will be at 15 h. telegraph time.

At 14-55 h. telegraph time, stations will again join over for through messages, and at 15·0 h., after a roll has been sent through by Calcutta to Bombay and answered, Calcutta will signal to Bombay the exact hour and minute of telegraph time at which the *last* beat of the roll was given; after which the transmission of through messages will commence, which will be continued until the desk at each end of the line is clear of messages, whether such messages were received prior to or after joining over, and irrespective of the time during which it may be necessary to continue such through signalling.

To give full effect to the arrangement, and to enable the mercantile community, in whose interest it is made, to derive the fullest benefit from it, notice should be circulated of the arrangement; and those proposing to take advantage of it should be advised to have their peons present for the receipt of any answers that may be received to their *through* messages.

It is obvious that by this arrangement messages, which at present and under ordinary circumstances occupy several hours in transit, will be transmitted in a few minutes, and that the errors caused by transmission through many repeating offices will be avoided, and further, that much labour will be saved to the signallers and others in the intermediate offices.

All messages tendered at Bombay for transmission to Calcutta, and *vice versâ*, during the three hours preceding that at which the transmission of through messages is to commence, should be reserved for through transmission, as being pretty certain to reach their destination at an earlier hour than if they had been sent on in due course. They should, of course, be transmitted in the order in which they are received; but it will be in a sender's option to have his message sent on in due course, and without detention for through transmission.

Should this experiment prove successful, it may be found convenient, after the Calcutta and Bombay desks are clear of messages for each other, to divide the line at Agra, for the receipt there of messages from Calcutta and Bombay which have to pass through the Agra office to their destination.

Under this extension of the system, messages from Calcutta to any place beyond Agra, as Gwalior, Indore, &c., and messages from Bombay to Delhi, Lahore, Benares, &c., should be detained until, all through messages have been transmitted; the line has been divided at Agra, when there will be a similar interchange of messages between Agra and Calcutta and Agra and Bombay to that previously carried on between Calcutta and Bombay.

The assistant in charge of each office on the line must be at the instrument from the moment he joins over until he receives an order from Calcutta to open out, without which order he will on no pretence whatever presume to do so. Any "clear line" messages received during the experiment must be held in abeyance until an order from Calcutta has opened the line. The assistants in charge of the offices at Calcutta, Benares, Agra, Indore, and Bombay—which, during *through* transmission, will be the only offices whose relays will be brought into action (all other stations joining over)—must pay particular attention to the state of their relays and line batteries, which, having to send their current unaided to distances averaging 400 miles, must be in the best possible order.

A detailed memorandum of instructions on these subjects will follow as soon as the preliminary experiments are concluded.

(To accompany Circular No. 115.)

Table of Comparison between Telegraph Time (Madras Local Time) and Local Time at the various Telegraph Stations in India.

Director General's Office, Calcutta, 6 September 1851.

NAMES OF STATIONS.	Number of Minutes by which (as compared with Telegraph Time) the Local Time is	Local Times which should be shown by Station Clocks at the undermentioned Telegraph Times.											
		Telegraph Times.		Telegraph Times.		Telegraph Times.		Telegraph Times.		Telegraph Times.		Telegraph Times.	
		Hrs. 2.	Mins. 0.	Hrs. 2.	Mins. 10.	Hrs. 2.	Mins. 20.	Hrs. 2.	Mins. 30.	Hrs. 2.	Mins. 40.	Hrs. 2.	Mins. 50.
Stations whose Local Time is fast:	Fast.												
Akyab	50	2	50	3	0	3	10	3	20	3	30	3	40
Allahabad	7	2	7	2	17	2	27	2	37	2	47	2	57
Atcheepore	33	2	33	2	43	2	53	3	3	3	13	3	23
Balasore	27	2	27	2	37	2	47	2	57	3	7	3	17
Barrackpore	33	2	33	2	43	2	53	3	3	3	13	3	23
Benares	11	2	11	2	21	2	31	2	41	2	51	3	1
Berhampore (East Coast).	18	2	18	2	28	2	38	2	48	2	58	3	8
Bezwarah	2	2	2	2	12	2	22	2	32	2	42	2	52
Bhagulpore	27	2	27	2	37	2	47	2	57	3	7	3	17
Bimlipatam	12	2	12	2	22	2	32	2	42	2	52	3	2
Burdwan	31	2	31	2	41	2	51	3	1	3	11	3	21
Burhee	21	2	21	2	31	2	41	2	51	3	1	3	11
Calcutta	33	2	33	2	43	2	53	3	3	3	13	3	23
Calingapatam	15	2	15	2	25	2	35	2	45	2	55	3	5
Cawnpore	1	2	1	2	11	2	21	2	31	2	41	2	51
Chatterpore	18	2	18	2	28	2	38	2	48	2	58	3	8
Chicacole	15	2	15	2	25	2	35	2	45	2	55	3	5
Chittagong	46	2	46	2	56	3	6	3	16	3	26	3	36
Coconada	8	2	8	2	18	2	28	2	38	2	48	2	58
Comillah	43	2	43	2	53	3	3	3	13	3	23	3	33
Cuttack	23	2	23	2	33	2	43	2	53	3	3	3	13
Dacca	41	2	41	2	51	3	1	3	11	3	21	3	31
Dehree	15	2	15	2	25	2	35	2	45	2	55	3	5
Dharwhar	29	2	29	2	39	2	49	2	59	3	9	3	19
Diamond Harbour	32	2	32	2	42	2	52	3	2	3	12	3	22
Dowlaishwaram	7	2	7	2	17	2	27	2	37	2	47	2	57
Furreedpore	38	2	38	2	48	2	58	3	8	3	18	3	28
Fyzabad	8	2	8	2	18	2	28	2	38	2	48	2	58
Gondah	8	2	8	2	18	2	28	2	38	2	48	2	58
Henzadah	60	3	0	3	10	3	20	3	30	3	40	3	50
Hooghly Point	33	2	33	2	43	2	53	3	3	3	13	3	23
Jellasore	28	2	28	2	38	2	48	2	58	3	8	3	18
Jessore	36	2	36	2	46	2	56	3	6	3	16	3	26
Kandy	2	2	2	2	12	2	22	2	32	2	42	2	52
Kedgeree	31	2	31	2	41	2	51	3	1	3	11	3	21
Kookrahatty	33	2	33	2	43	2	53	3	3	3	13	3	23
Kyook Phyoo	53	2	53	3	3	3	13	3	23	3	33	3	43
Lucknow	3	2	3	2	13	2	23	2	33	2	43	2	53
Masulipatam	3	2	3	2	13	2	23	2	33	2	43	2	53
Menghye	59	2	59	3	9	3	19	3	29	3	39	3	49
Midnapore	29	2	29	2	39	2	49	2	59	3	9	3	19
Mirzapore	10	2	10	2	20	2	30	2	40	2	50	3	0
Monghyr	25	2	25	2	35	2	45	2	55	3	5	3	15
Mud Point	33	2	33	2	43	2	53	3	3	3	13	3	23
Padeng	60	3	0	3	10	3	20	3	30	3	40	3	50
Patna	20	2	20	2	30	2	40	2	50	3	0	3	10
Pegu	64	3	4	3	14	3	24	3	34	3	44	3	54
Prome	60	3	0	3	10	3	20	3	30	3	40	3	50
Rajmehal	30	2	30	2	40	2	50	3	0	3	10	3	20
Ramoo	47	2	47	2	57	3	7	3	17	3	27	3	37
Raneegunge	28	2	28	2	38	2	48	2	58	3	8	3	18
Rangoon	64	3	4	3	14	3	24	3	34	3	44	3	54
Rewah	4	2	4	2	14	2	24	2	34	2	44	2	54
Sasseram	15	2	15	2	25	2	35	2	45	2	55	3	5
Saugor Island	31	2	31	2	41	2	51	3	1	3	11	3	21
Sherghotty	18	2	18	2	28	2	38	2	48	2	58	3	8
Shoaygheen	66	3	6	3	16	3	26	3	36	3	46	3	56
Thyetmoo	59	2	59	3	9	3	19	3	29	3	39	3	49
Vizagapatam	12	2	12	2	22	2	32	2	42	2	52	3	2
Vizianagram	12	2	12	2	22	2	32	2	42	2	52	3	2

Chap. IV.
Electric Telegraph.

NAMES OF PLACES.	Number of Minutes by which (as compared with Telegraph Time) the Local Time is	Local Times which should be shown by Station Clocks at the undermentioned Telegraph Times.											
		Telegraph Times.		Telegraph Times.		Telegraph Times.		Telegraph Times.		Telegraph Times.		Telegraph Times.	
		Hrs. 2.	Mins. 0.	Hrs. 2.	Mins. 10.	Hrs. 2.	Mins. 20.	Hrs. 2.	Mins. 30.	Hrs. 2.	Mins. 40.	Hrs. 2.	Mins. 50.
Stations whose Local Time is Slow:	Slow.												
Acberpore - -	19	1	41	1	51	2	1	2	11	2	21	2	31
Agra - - -	9	1	51	2	1	2	11	2	21	2	31	2	41
Ahmedabad - -	31	1	29	1	39	1	49	1	59	2	9	2	19
Ahmednuggur -	24	1	36	1	46	1	56	2	6	2	16	2	26
Allyghur - -	9	1	51	2	1	2	11	2	21	2	31	2	41
Attock - - -	32	1	28	1	38	1	48	1	58	2	8	2	18
Bangalore - -	10	1	50	2	0	2	10	2	20	2	30	2	40
Bareilly - - -	3	1	57	2	7	2	17	2	27	2	37	2	47
Baroda - - -	28	1	32	1	42	1	52	2	2	2	12	2	22
Bellary - - -	13	1	47	1	57	2	7	2	17	2	27	2	37
Belgaum - -	23	1	37	1	47	1	57	2	7	2	17	2	27
Beowra - - -	13	1	47	1	57	2	7	2	17	2	27	2	37
Bombay - - -	30	1	30	1	40	1	50	2	0	2	10	2	20
Broach - - -	29	1	31	1	21	1	51	2	1	2	11	2	21
Buddena - -	46	1	14	1	24	1	34	1	44	1	54	2	4
Bulsar - - -	29	1	31	1	41	1	51	2	1	2	11	2	21
Calicut - - -	18	1	42	1	52	2	2	2	12	2	22	2	32
Cannanore - -	19	1	41	1	51	2	1	2	11	2	21	2	31
Carical - - -	2	1	58	2	8	2	18	2	28	2	38	2	48
Chanda - - -	4	1	56	2	6	2	16	2	26	2	36	2	46
Chinoor - - -	2	1	58	2	8	2	18	2	28	2	38	2	48
Cochin - - -	14	1	46	1	56	2	6	2	16	2	26	2	36
Colombo - -	2	1	58	2	8	2	18	2	28	2	38	2	48
Coonoor - - -	14	1	46	1	56	2	6	2	16	2	26	2	36
Dapoorie - -	26	1	34	2	44	1	54	2	4	2	14	2	24
Deesa - - -	33	1	27	1	37	1	47	1	57	2	7	2	17
Delhi - - -	12	1	48	1	58	2	8	2	18	2	28	2	38
Dera Gazee Khan -	37	1	23	1	33	1	43	1	53	2	3	2	13
Dera Ismael Khan -	38	1	22	1	32	1	42	1	52	2	2	2	12
Dhoolia - - -	22	1	38	1	48	1	58	2	8	2	18	2	28
Futtyghur - -	2	1	58	2	8	2	18	2	28	2	38	2	48
Galle - - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Goa - - -	25	1	35	1	45	1	55	2	5	2	15	2	25
Gudduck - -	2	1	58	2	8	2	18	2	28	2	38	2	48
Gwalior - - -	8	1	52	2	2	2	12	2	22	2	32	2	42
Hyderabad (C. I.) -	7	1	53	2	3	2	13	2	23	2	33	2	43
Hydrabad (Sind) -	47	1	13	1	23	1	33	1	43	1	53	2	3
Indore - - -	2	1	58	2	8	2	18	2	28	2	38	2	48
Jacobabad - -	46	1	14	1	24	1	34	1	44	1	54	2	4
Jubbulpore - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Jullunder - -	19	1	41	1	51	2	1	2	11	2	21	2	31
Kamptee - -	4	1	56	2	6	2	16	2	26	2	36	2	46
Keamaree - -	53	1	7	1	17	1	27	1	37	1	47	1	57
Kolapore - -	24	1	36	1	46	1	56	2	6	2	16	2	26
Kotree - - -	47	1	13	1	23	1	33	1	43	1	53	2	3
Kurnool - -	9	1	51	2	1	2	11	2	21	2	31	2	41
Kurrachee - -	53	1	7	1	17	1	27	1	37	1	47	1	57
Kusmore - -	42	1	18	1	28	1	38	1	48	1	58	2	8
Kussowlee - -	13	1	47	1	57	2	7	2	17	2	27	2	37
Lahore - - -	24	1	36	1	46	1	56	2	6	2	16	2	26
Malabar Point -	30	1	30	1	40	1	50	2	0	2	10	2	20
Malligaum - -	23	1	37	1	47	1	57	2	7	2	17	2	27
Manaar - - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Matheran - -	28	1	32	1	42	1	52	2	2	2	12	2	22
Meerut - - -	19	1	41	1	51	2	1	2	11	2	21	2	31
Mercara - - -	17	1	43	1	53	2	3	2	13	2	23	2	33
Mahableshwur -	26	1	34	1	44	1	54	2	4	2	14	2	24
Mooltan - - -	35	1	25	1	35	1	45	1	55	2	5	2	15
Moradabad - -	6	1	54	2	4	2	14	2	24	2	34	2	44
Mount - - -	24	1	36	1	46	1	56	2	6	2	16	2	26
Murree - - -	27	1	33	1	43	1	53	2	3	2	13	2	23
Mysore - - -	14	1	46	1	56	2	6	2	16	2	26	2	36
Nagpore - -	13	1	47	1	57	2	7	2	17	2	27	2	37
Nassick - - -	26	1	34	1	44	1	54	2	4	2	14	2	24
Negapatam - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Nellore - - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Nuggur Parkur -	38	1	22	1	32	1	42	1	52	2	2	2	12
Nynee Tal - -	3	1	57	2	7	2	17	2	27	2	37	2	47

CHAP. IV.
Electric Telegraph.

NAMES OF STATIONS.	Number of Minutes by which (as compared with Telegraph Time) the Local Time is	Local Times which should be shown by Station Clocks at the undermentioned Telegraph Times.											
		TELEGRAPH TIMES.		TELEGRAPH TIMES.		TELEGRAPH TIMES.		TELEGRAPH TIMES.		TELEGRAPH TIMES.		TELEGRAPH TIMES.	
		Hrs. 2.	Mins. 0.	Hrs. 2.	Mins. 10.	Hrs. 2.	Mins. 20.	Hrs. 2.	Mins. 30.	Hrs. 2.	Mins. 40.	Hrs. 2.	Mins. 50.
Stations whose Local Time is slow:	Slow.												
Ongole - - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Ootacamund - -	14	1	46	1	56	2	6	2	16	2	26	2	36
Parell - - -	12	1	48	1	58	2	8	2	18	2	28	2	38
Paumben - -	4	1	56	2	6	2	16	2	26	2	36	2	46
Peshawur - -	34	1	26	1	36	1	46	1	56	2	6	2	16
Pondicherry - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Poona - - -	25	1	35	1	45	1	55	2	5	2	15	2	25
Puttoocottah - -	4	1	56	2	6	2	16	2	26	2	36	2	46
Rajunpore - -	40	1	20	1	30	1	40	1	50	2	0	2	10
Rawul Pindee -	31	1	29	1	39	1	49	1	59	2	9	2	19
Sattara - - -	25	1	35	1	45	1	55	2	5	2	15	2	25
Sawunt Warree -	25	1	35	1	45	1	55	2	5	2	15	2	25
Secunderabad - -	7	1	53	2	3	2	13	2	23	2	33	2	43
Seerah - - -	13	1	47	1	57	2	7	2	17	2	27	2	37
Seonee - - -	3	1	57	2	7	2	17	2	27	2	37	2	47
Seepree - - -	10	1	50	2	0	2	10	2	20	2	30	2	40
Seroor - - -	23	1	37	1	47	1	57	2	7	2	17	2	27
Shajehanpore - -	1	1	59	2	9	2	19	2	29	2	39	2	49
Shikarpore - -	46	1	14	1	24	1	34	1	44	1	54	2	4
Simla - - -	12	1	48	1	58	2	8	2	18	2	28	2	38
Sukkur - - -	45	1	15	1	25	1	35	1	45	1	55	2	5
Surat - - -	29	1	31	1	41	1	51	2	1	2	11	2	21
Tannah - - -	29	1	31	1	41	1	51	2	1	2	11	2	21
Taroosha - -	48	1	12	1	22	1	32	1	42	1	52	2	2
Tonghoo - -	36	1	24	1	34	1	44	1	54	2	4	2	14
Tuticorin - -	8	1	52	2	2	2	12	2	22	2	32	2	42
Umballa - -	14	1	46	1	56	2	6	2	16	2	26	2	36
Umritsur - -	22	1	38	1	48	1	58	2	8	2	18	2	28
Vellore - - -	4	1	56	2	6	2	16	2	26	2	36	2	46
Vingorla - -	27	1	33	1	43	1	53	2	3	2	13	2	23
Warrungal - -	2	1	58	2	8	2	18	2	28	2	38	2	48

GOVERNMENT TELEGRAPH DEPARTMENT.

Instrument Branch, Circular No. 117.

From Lieutenant Colonel *C. Douglas,* Officiating Director General of Telegraphs in India, to the Assistant in Charge   Office; dated Calcutta, the 14th September 1861.

A MESSAGE to all stations, dated the 28th February, prohibited the use of salt in line batteries.

Experiments conducted by Mr. Lane, at Agra, with a battery prepared without salt, led to the expectation that inconveniences might be expected from the well-known effect of the current in causing a transfer of liquid from the positive or zinc to the negative or copper side of the cells. A subsequent experiment by Mr. Lane showed that, whether from a difference in quality of the porous cells used, or other cause, the action in question, if it existed, did not exist to a marked or inconvenient extent.

When publishing the message above referred to, it was not thought desirable to give any caution on this point; because by most assistants the action and its reason and remedy would be known, and also because that, where unknown, no explanation of reasonable brevity was at all likely to be understood.

It has long been known that the effect of a current of electricity passing through a liquid, whether forming part of a galvanic element or not, provided the liquid is divided into two portions by a porous partition into which a wire from the two poles of a battery is led, is to raise the level of the liquid on that side which corresponds with the negative side of the battery, the action increasing with the strength of the current and with the resistance or bad conductivity of the liquid; but that when the liquids were good conductors, the action in question was imperceptible. Now as, by the employment of salt on the zinc or positive side of the battery, the conductivity of the liquid in contact with the zinc-plate is increased, as compared with the conductivity of plain water, in the ratio of perhaps 1 to 50, it was to be expected that the "osmotic" effect referred to, although little perceptible in batteries prepared with salt, might become inconvenient in the case of batteries prepared with plain water; and such indeed would be the case were the liquid on the zinc side to continue throughout its action pure water, but this cannot be; for the effect of action in the battery is to produce on the zinc side a solution of sulphate of zinc of continually increasing strength—an effect which, if permitted to continue sufficiently long, would stop the action of the battery altogether, by filling up the zinc side with crystals of sulphate of zinc.

It is obvious that the continually increasing production of the zinc salt must, by continually increasing the conductivity of the liquid on the zinc side, as continually diminish the tendency to osmotic action, and that, to avoid inconvenience from this action, it is sufficient when preparing a fresh battery to employ, instead of plain water, a mixture of water with some of the zinc solution obtained from the battery which is under renewal.

The simplest way of effecting this is by passing the entire of the solution from the zinc side of the old battery through a couple of folds of cloth, to remove any dirt or particles of copper or other negative metal, the result of local action, which it may contain, making up any deficiency in the bulk of the liquid by the addition of plain water, and using this in lieu of plain water on the zinc side of the new battery.

I take this opportunity of explaining why no inconvenience need be apprehended from the disuse of salt.

In each description of battery element there is a characteristic energy, usually termed electro-motive force, which, differing in the different classes of batteries, is in each class absolutely independent of the size of the battery-plates or the strength or conductivity of the solution employed; for instance, in Grove's element, or the modification of it, called Bunsen's, having strong nitric acid on the negative side, the electro-motive force of each cell may be represented by 100. In Daniel's element, used for line and local purposes on the Indian lines, this force may be represented by 57, and in Smee's or Woollaston's element by 25.

Now, it is this electro-motive force alone which produces the electric current, the one being proportional to the other; and as this force is independent of the size of the plates composing the battery, or of their distance apart, or of the conductivity of the liquids used in the battery, but dependent solely on the nature and number of the elements used, it may reasonably be asked why in some batteries large plates placed close together, or acid solutions are employed? The reply to the question is, that large plates increase the sectional area of the battery liquids through which the current passes, and, like a similar increase to the size of metal conductors, facilitates the passage of the current.

In like manner, approximating the plates by shortening the course of the current, like shortening a metal-conducting wire, gives greater freedom for the passage of the current. Again, acids and salts, by increasing the conductivity of the solution, have the same effect as a change from a worse to a better conductor, as from iron to copper.

Experiments were on the 1st current tried in the Calcutta office with batteries prepared with and without salt. The result was that no differences could be observed between a series of 36* cells *without* salt, compared with one of 40 cells *with* salt; and the same result was obtained when the two series were reduced successively to 30, 20, 10, and 5 cells. The experiments were performed on the line from Calcutta to Kedgeree, a distance of 80 miles, with one submarine cable of two miles in length intervening. Signals were readable with all the combinations, excepting with those of five cells.

This circular leaves the use or disuse of salt on the zinc side of batteries entirely at the discretion of assistants, who are reminded that care in keeping up the strength of the sulphate-of-copper solution by a constant supply of large crystals will have far greater influence on the efficiency of their batteries than any variation in the nature of the solution around the zinc.

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 118.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Assistant in Charge Office; dated Calcutta, the 15th September 1861.

I forward a table showing the resistances to the passage of a current of electricity offered by iron and copper wires of the sizes shown by the numbers on the Birmingham wire-gauge. No. 1 iron wire has been taken as the unit of resistance, to which the resistances of all other sizes of wire, whether of iron or copper, have been referred. The term *resistance* is intended to imply the inverse of what is usually termed *conductivity*.

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* This number was by mistake used instead of 40; the error was not discovered until the experiments had made some progress.

The following examples will show the uses to which this table may be applied:—

First Example.

What length of line composed of No. 8 iron wire will offer the same resistance, and therefore permit of being worked by the same sized battery, as a line of No. 1 iron wire 120 miles long?

As (3·306, &c., or say) 3·3, the measure of resistance of No. 8 iron wire, is to 1·0, the measure of resistance of No. 1 iron wire, so is 120 miles, the given length of No. 1 wire, to 66½ miles, nearly the length of the No. 8 wire sought.

Second Example.

I have a line of telegraph 100 miles long to construct, and desire that it shall not offer greater resistance to the current than a line of similar length constructed of No. 1 iron wire. I have, however, none of the latter, but propose substituting No. 16 copper wire for it—how should I proceed?

I find from the table, that the resistance of No. 16 copper wire is 3·877 times as great as that of an equal length of No. 1 iron wire; consequently, by twisting four stands of the copper wire together, I have a conductor whose resistance is equal to one-fourth of 3·877, or 0·97 miles nearly—a resistance somewhat under that of No. 1 iron wire.

Third Example.

I am anxious to ascertain the exact amount of additional resistance caused by a galvanometer, such as is used in the Calcutta Signal Office, and made in the Calcutta workshop—the galvanometer containing 200 yards, or 0·11364 miles of No. 34 copper wire.

The resistance of this size of wire is, as shown by the table, nearly 334 times that of No. 1 iron wire, consequently the resistance of the wire composing the galvanometer is equal to 37·9, or nearly 38 miles of No. 1 iron wire; and as on any section of line, say that between Calcutta and Burdwan, a distance of 67 miles, the current has to pass through two galvanometers, viz., one each at Burdwan and Calcutta, the resistance due to these galvanometers alone is equal to that offered by 57 miles of No. 1 iron wire, and therefore nearly equals the resistance of the line itself, which is of No. 1 wire and 67 miles long, a circumstance which shows the great importance of reducing this obstruction to currents as much as possible by throwing the galvanometers out of the circuit whenever possible, and especially when working long stretches in D.

These considerations also show the importance of employing galvanometers, which, whether from having a thicker or a shorter wire, or still more from both causes united, oppose less resistance to the current than the one just described. Such are the galvanometers designed by Sir William O'Shaughnessy, and described in page 103 of his Manual, in which the wire is 1-130th of an inch, or ·0077 inches in diameter and 50 yards long. Now, if we leave out of consideration the reduction of resistance gained by the slightly greater diameter of the wire used in this last, then, as its length is only 1-12th of that previously described, its resistance is equivalent to that of 3·16 miles of No. 1 iron wire, and the resistance of two such galvanometers to 6·3 miles of No. 1 wire, instead of to 57 miles, as in the case of the galvanometers in present use.

There are, no doubt, occasions when the difficulty of receiving renders the employment of very sensitive galvanometers necessary, and it might be in this view convenient to construct galvanometers with successive coils of wire, any number of which might be joined together end to end by appropriate contact plugs, such number only being used as the occasion might demand.

I take this opportunity of remarking, that if the same sized frame is used for galvanometers prepared from wire of different diameters, then, neglecting the thickness due to the silk covering of the wire, if the diameters of the wires are as 1, 2, 3, 4, &c., the length which can be wound on the frame so as to fill it; and consequently the sensibility to a current will be as 1, $\frac{1}{4}$, $\frac{1}{9}$, $\frac{1}{16}$, &c., and the resistances as 1, $\frac{1}{16}$, $\frac{1}{81}$, $\frac{1}{256}$, &c., showing the very rapid diminution of resistance caused by the employment of thick wire in galvanometers, and the desirability of using such mode of reducing resistance whenever circumstances permit.

Fourth Example.

An Inspector of Lines has doubts as to the attention paid by a certain assistant to the state of his line batteries, believing that an unnecessary number of elements are employed for the distance, which is 100 miles. He has a section of line of 50 miles in length over which an assistant, known to be careful, is able to work well with 20 elements, and desires to know the number of elements which should suffice for the line of 100 miles in length, both being alike as respects description of galvanometer, size of line wire, &c. The current has to pass in each case through the line battery, through the instrument connexions whose resistances being trifling may be neglected; then through the galvanometer of the near station; thence along the line wire to the distant galvanometer and relay, and thence through the earth to the battery from which it started. Now, assuming the galvanometers to be those described in Example 3, we have each of their resistances equal to that due to 28½ miles of No. 1 line wire. Again, the coils of the distant Morse relay by Siemens contain in all 440 yards or ·447 miles of copper wire, ·0075 in diameter, or No. 33½ gauge, whose resistance will equal 140·6 miles of line wire. The resistance of the earth is inappreciable. The resistance of the elements themselves, as in no way affecting the calculation, is omitted.

The comparison lies thus :—

In the 100 *miles Line.*		*In the* 50 *miles Line.*	
2 galvanometers - - -	57·0 miles	2 galvanometers - - -	57·0 miles
1 relay - - - -	140·6 „	1 relay - - - -	140·6 „
100 miles line wire - -	100·0 „	50 miles line wire - - -	50·0 „
Total resistances - -	297·6 miles	Total resistances - -	247·6 miles

whence, by simple proportion, we find that the number of elements required for the 100 miles line is very nearly but not quite 24, instead of 40, as might at first sight, from the comparative lengths of the line, have been expected. It should be remarked that this form of calculation applies to lines in which, whether from good insulation or from dryness of weather, there is little loss of current through the posts. Where losses of current are great, the calculation is more complicated.

The advantage of working in D as far as possible, when attempting direct communication with very distant stations, is so obvious, the risks attendant on the management of so many relays being thereby so greatly reduced, that it is worth while to attempt to remove the obstructions offered by the present galvanometers, as well as to reduce the number through which the current passes. For the first of these objects, it is intended to furnish short wire galvanometers to all offices which may be required to work in D (at present only those on the three direct lines of communication between the Presidency towns), and for the latter object a rheotrope, by means of which either one or both of the galvanometers can, when working in D, be at pleasure thrown out of the circuit.

Table of the Lengths of Iron Wire No. 1, equivalent in electrical resistance to unity of length of each of the undermentioned sizes of Iron and Copper Wire.

N.B.—The resistance of Iron has been assumed equal to 5·5 or 5½ times that of Copper, in accordance with Dr. Matthiessen's experiments.

Number of the Birmingham Wire Gauge.	Corresponding Diameter in Inches.		Resistances of like lengths, that of Iron Wire being taken as unity.		Number of the Birmingham Wire Gauge.	Corresponding Diameter in Inches.		Resistances of like lengths, that of Iron Wire being taken as unity.		Number of the Birmingham Wire Gauge.	Corresponding Diameter in Inches.		Resistances of like lengths, that of Iron Wire being taken as unity.	
	In Vulgar Fractions.	In Decimals.	Iron Wire.	Copper Wire.		In Vulgar Fractions.	In Decimals.	Iron Wire.	Copper Wire.		In Vulgar Fractions.	In Decimals.	Iron Wire.	Coppe Wire.
1	$\frac{1}{3\cdot33}$	·300	1·000	0·182	13	$\frac{1}{10\cdot3}$	·095	9·972	1·813	25	$\frac{1}{50}$	·020	225·0	40·91
2	- -	·284	1·116	0·203	14	$\frac{1}{12\cdot04}$	·083	13·06	2·375	26	- -	0·18	277·8	50·51
3	- -	·259	1·342	0·244	15	- -	·072	17·36	2·752	27	$\frac{1}{62\cdot5}$	·016	351·6	63·92
4	$\frac{1}{4\cdot2}$	·238	1·589	0·289	16	- -	·065	21·30	3·877	28	- -	·014	459·2	83·49
5	$\frac{1}{4\cdot5}$	·220	1·860	0·338	17	- -	·058	26·75	4·864	29	$\frac{1}{77}$	·013	532·5	96·83
6	- -	·203	2·184	0·397	18	$\frac{1}{20\cdot4}$	·049	37·48	6·815	30	- -	·012	625·0	113·6
7	- -	·180	2·778	0·505	19	- -	·042	51·02	9·276	31	$\frac{1}{100}$	·010	900·0	163·6
8	$\frac{1}{6\cdot06}$	·165	3·306	0·601	20	- -	·035	73·47	13·36	32	- -	·009	111·1	202·0
9	- -	·148	4·109	0·747	21	$\frac{1}{31\cdot25}$	·032	87·89	15·98	33	$\frac{1}{125}$	·008	140·6	255·7
10	- -	·134	5·012	0·911	22	- -	·028	114·8	20·87	34	$\frac{1}{143}$	·007	183·6	334·0
11	$\frac{1}{8\cdot33}$	·120	6·240	1·136	23	$\frac{1}{40}$	·025	144·0	26·18	35	$\frac{1}{200}$	·005	360·0	654·5
12	- -	·109	7·575	1·377	24	- -	·022	186·0	33·81	36	$\frac{1}{250}$	·004	562·5	102·2

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 119.

From Lieutenant Colonel *C. Douglas,* Officiating Director General of Telegraphs in India, to the Assistant in Charge   Office; dated Calcutta, 16 September 1861.

IT has come to my knowledge that the fines imposed on signallers and others, by assistants in charge of offices, are frequently greatly disproportionate both to the nature of the offence and the salary drawn by the person fined, which in many instances is so reduced by this practice as to lead, and most reasonably, to much discontent in the grades in question.

It is, therefore, now directed that it shall not be in the power of any officer below the grade of superintendent to reduce the pay of any person in the Department, and that the highest amount which it shall be competent for deputy superintendents to inflict, shall not exceed 10 per cent. on the *net salary** of any one person in any one month.

It will be the duty of all inspectors and assistants in charge of offices, &c., to bring immediately to the notice of superintendents all cases of neglect or insubordination which they consider deserving punishment; and this officer will, in ordinary cases, decide the amount of fine to be inflicted within the above limit. But should the case be such that the maximum amount of fine (10 per cent. on the net salary) is not considered adequate to the nature of the offence, the superintendent will submit the matter, through the Director of his division, for the Director General's orders.

The further punishments may be, unfavourable notice in the character book, loss of office allowance (in whole or in part), or loss of steps the departmental seniority list, as may be recommended by the Director of the division, or otherwise ordered by the Director General.

GOVERNMENT TELEGRAPH DEPARTMENT.

Audit Branch, Circular No. 120.

From Lieutenant Colonel *C. Douglas,* Officiating Director General of Telegraphs in India, to the Assistant in Charge   Office; dated Calcutta, 17 September 1861.

A FORM of cash collection return having lately been introduced for exhibiting and reporting to Government the monthly cash collections of the Department, the following rules are laid down for the preparation of these returns:—

2. The reports of cash collections will be sent from signal offices to deputy superintendents by telegraph (Form No. 1) at two hours, and by post in detail (Form No. 2), on the first day of each month. They must show the amount received from service, telegraph service, and private messages, as well as from peon-hire, boat-hire, postage with registration, and fees† (these last four items being in the *Telegraph* Report reported in *one* total as *charges*), also the total receipts, and the shares of the total in telegraph stamps and cash. Should the entire receipts be either cash or stamps exclusively, then the double of the total must be given in the Telegraph Report; but under no other circumstances will doubles be given in such reports. These reports will be embodied by deputy superintendents in one general report for the circle, which must be forwarded by telegraph at two hours on the 2d of each month (in Form No. 3), and by post (in Form No. 4), on the day following the receipt of the posted reports of all offices.

3. On receipt of these Telegraph Reports, six copies of the cash collection return (Form No. 5) will be filled up in the Compiler's (late Auditor's) Office, of which two copies will be forwarded to the Officiating Director General (one being for submission to Government by him, or, in his absence from the Presidency, by the next senior officer present), the other for record in the Director General's Office; also one copy to each of the three divisional superintendents, and one copy for record in the Compiler's Office. The Officiating Director General will communicate to each deputy superintendent the gain or loss in the earnings of his circle for private messages, as compared with the corresponding month of the year preceding, in the form (No. 6) annexed.

4. In the cash collection reports the separate totals of cash collections on account of every kind of message transmitted must be reported, and in no case is any cash collection report

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* By net salary is meant pay, Morse, and ear allowances, these latter being now under consolidation as pay.

† A fee of 1 rupee is charged to every person requiring information of the movements of ships on the River Hooghly, in anticipation of the partial issues of the "Telegraph Gazette," and also for every copy of a message supplied from the Complaint Office to the sender or receiver.

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report to include, *under the same heading,* collections made for two separate accounts; for instance, the cash taken on account of the Red Sea or other private lines, and held by the Government of India at the credit of those lines, must be reported separately from the share belonging to the Indian Government lines. As regards paid messages sent for, or bearing messages received at, any offices of the Ceylon lines, the share belonging to the Indian Government only will be reported by the Ceylon deputy superintendent, who will show the proportion chargeable to service and private messages; and the additional rate charged on Indian messages for conveyance over any part of the Ceylon lines, must be excluded from the cash collections credited to the Government of India in the reports of the Indian deputy superintendents, and must be reported under a separate heading. It will be observed that in these reports no coin of lower denomination than the anna is recognised; in cases where smaller sums than the anna have to be reported, the following fractions of the anna, viz. ¼, ½, ¾, and no other, must be used. The *pro formâ* charges at Goa, Pondicherry, and Carical, and on the Hooghly River need not be reported by telegraph, but should be shown in the return sent by post. The returns should be sent in at once from the 1st of June last up to date, exhibiting the collections from the 1st of May, the commencement of the present official year.

5. In the case of the cash collection return sent from the Director General's Office to Government, the following rule for checking the accuracy with which the columns of increase or decrease, and the totals generally have been calculated, will be used:—

Rule.—The difference between the totals of cash collections in any corresponding months of the present and past years, is equal to the difference of the totals of increase and decrease, provided the calculations in question have been correctly made.

(Form No. 1.)

From (Station) To (Station)
„ Assistant. „ Dy. Supdt.

Words, Tel. Ser. Free.

Collections:—Service, *Rs.* *as.* ; telegraph, *Rs.* *as.* ; private, *Rs.* *as.* ; charges, *Rs.* *as.* ; Total, *Rs.* *as.* ; cash, *Rs.* *as.* ; stamps, *Rs.* *as.* .

N. B.—The amount received for bearing messages must not be shown *separately* in the Telegraph Report, but will appear under its proper heading in the report sent by post. Should the entire collections be either in cash or in stamps, then the separate reports of cash or of stamps must be omitted, as they are obviously useless as a check on the accuracy of the total; but in such case, as a check, the double must be given. Where part is in cash and part in stamps, the total affords the required check.

Example.

(The Collections having been received partly in Cash and partly in Stamps).

From Delhi To Umballa
„ Assistant. „ Dy. Supdt.

Words Tel. Ser. Free.

Collections:—Service, *Rs.* 150. *as.* 8½.; telegraph, *Rs.* 20. *as.* 4.; private, *Rs.* 430. *as.* 12¼.; charges, *Rs* 3. *as.*–.; Total, *Rs.* 604. *as.* 8¾.; cash, *Rs.* 541. *as.* 4¾.; stamps, *Rs.* 63. *as* 4.

N. B.—Supposing the collections were of one denomination, that is, all cash or all stamps, then the above report beginning at the total would, supposing the receipts to have been entirely cash, run as follows:—

Total cash, *Rs.* 604. *as.* 8¾; half, *Rs.* 1,209. *as.* 1½.

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(Form No. 2.)

Collections in Cash and Stamps of the Office for 186 .

NATURE OF COLLECTION.	186 .	Previous Month's Report.	Increase.	Decrease.
	Rs. as.	*Rs. as.*	*Rs. as.*	*Rs. as.*
Service paid - - - - - -				
Service bearing - - - - -				
Telegraph service paid - - - -				
Private paid - - - - - -				
Private bearing - - - - -				
Postage and registration - - -				
Peon - - - - - - -				
Boat - - - - - - -				
Fees - - - - - - -				
		Total Increase and Decrease on last month - - - - *Rs.*		

N.B.—Of the total collections of this month, *Rs.* *as.* were received in cash, and *Rs.* *as.* in stamps.

(Form No. 3.)

From (Station) To (Station
„ Dy. Supdt. „ Director General.

Words Tel. Ser.-Free.

Collections :—Service, *Rs.* *as.* ; telegraph, *Rs.* *as.* ; private, *Rs.* *as.* ; charges, *Rs.* *as.* ; total, *Rs.* *as.* ; cash, *Rs.* *as.* ; stamps, *Rs.* *as.* .

N. B.—The amount received for bearing messages must not be shown *separately* in the Telegraph Report, but will appear under its proper heading in the report sent by post. Should the entire collection be either in cash or in stamps, then the separate reports of cash or of stamps must be omitted, as they are obviously useless as a check on the accuracy of the total; but in such case, as a check, the double must be given. Where part is in cash and part in stamps, the total affords the required check.

(Form No 4.)

Collections of the Circle for 186 .

NAMES OF OFFICES.								
Nature of Collection :	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*
Service paid - - - - -								
Service bearing - - - - -								
Telegraph service paid - - -								
Private paid - - - - -								
Private bearing - - - - -								
Postage and register - - - -								
Peon - - - - - -								
Boat - - - - - -								
Fees - - - - - -								
Cash - - - - - -								
Stamps - - - - - -								
Total - - - *Rs.*								

(Form No. 5.)

Government Telegraph Department.

Return of Collections in Cash and Stamps on Service and Private Messages (showing Increase and Decrease on corresponding Month of last Year) for 186 .

N. B.—This Return does not include Cash received to credit of any Lines other than those belonging to the Government of India, nor the Cash Payments made by persons in the Department for the Messages they may send on its business, nor the *pro formâ* charges for such of the Messages of the Marine Department as are sent by the River Lines.

Circles.	Collections in 186 .			Collections in 186 .			Increase.			Decrease.			Circles.
	Service.	Private.	Total.	Service.	Private.	Total.	Service.	Private.	Total.	Service.	Private.	Total.	
	Rs. as.	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	*Rs. as.*	
Bengal -													Bengal.
Bombay -													Bombay.
Madras -													Madras.
Punjab -													Punjab.
Central India													Central India.
Pegu - -													Pegu.
Dacca - -													Dacca.
Indore - -													Indore.
East Coast -													East Coast.
Sind - -													Sind.
South East Coast.													South East Coast.
Ceylon -													Ceylon.
Total - *Rs.*													
Totals of Increase and Decrease on corresponding month of last year, *Rs.*													

(Form No. 6.)

Government Telegraph Department.

General Branch, No. .

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Deputy Superintendent, Circle; dated Calcutta, the of 186 .

I annex extract from Report to the Government of India of the cash collections of the Department during the month of last, showing the increase or decrease on the corresponding month of last year.

Extract

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EXTRACT from the Officiating Director General's Report to the Government of India of the Cash Collections in the Telegraph Department (showing increase or decrease on the corresponding month of last year) for the month of 1861.

N.B.—This return does not include cash received to credit of any lines other than those belonging to the Government of India, nor the cash payments made by persons in the Department for the messages they may send on its business, nor the *pro formâ* charges for such of the messages of the Marine Department as are sent by the river lines.

Circle.

MONTH.	YEAR.	SERVICE.		PRIVATE.		TOTAL.	
		Rs.	*a.*	*Rs.*	*a.*	*Rs.*	*a.*
	1861						
	1860						
Increase - - - -	*Rs.*						
	Per cent .						
Decrease - - - -	*Rs.*						
	Per cent. -						

REMARKS.—The total collections of the Department on private messages for the month were *Rs.* , being per cent. $\left\{\begin{matrix}\text{over}\\\text{under}\end{matrix}\right\}$ those for the corresponding month of last year.

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 121.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Assistant in Charge, Office dated Calcutta, 24 September 1861.

I REQUEST that in view to reduce, as far as possible, the number of undelivered messages, a vernacular list of natives whose addresses have not been found may be posted on the outside of the office, in the usual place for such notices, in addition to the list posted in English.

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 126.

From Lieutenant Colonel *C. Douglas*, Officiating Director General of Telegraphs in India, to the Assistant in Charge Office; dated Calcutta, 13 November 1861.

IN continuation of Circular No. 119, of the 16th September last, it is now directed that the arrangements hitherto in force in the Complaint Office for recovering the value of messages the cost of which has been refunded to the senders in consequence of such having been lost in transit or so mutilated as to be unintelligible, will be experimentally changed. It has hitherto been the custom, when a message has been lost, to recover the full amount from the assistant in charge, and in cases of gross error to recover half the amount from the assistant in charge, and the remainder in equal portions from the two signallers whose names are given in the message drafts of the offices between which the error occurred; or, where the error was of such a nature as not to be easily discovered on perusal by the assistant in charge, then the total value of the message was recovered in equal shares from the signallers concerned. Under this arrangement the amount of fine became regulated, not by the amount of error or neglect, but by the length of the message and the distance through which it had to be sent, circumstances in no way connected with, and therefore no fair measure of the amount of, the fault or of the punishment it should receive.

This system will, therefore, be experimentally changed, and for the future fines for losses of messages and errors will be regulated as follows:—

In the case of the *loss* of a message, the assistant on duty at the time of its receipt in the office in which it has been lost will be fined its full value, provided that does not exceed 10 rupees, this sum being the maximum. In the case of *error* the fines will be distributed as follows:—

On the assistant by whom the copy in which the error appears was signed, 3 rupees; on the receiving signaller, 2 rupees; and on the sending signaller, 1 rupee. This arrangement is based on the consideration that the chief cause of the errors shown in the copies of messages is attributable to neglect on the part of the assistants in receiving offices of the *very important* duty of examining the messages before permitting their onward transmission, and that of the two signallers concerned in the transmission of a message, the sender is less blameable for errors than the receiver; it being the business of the latter, on completing the text of a message, to collate it, by counting the number of words and examining the sense, and in the event of obscurity, referring his doubts to the assistant on duty, or in the case of apparent error, calling on the sending signaller for repetition of the doubtful portion.

The above scale of fines is the maximum to be at any time inflicted by the Complaint Branch of this office; the minimum fines will be half these amounts, and such amounts of fines will be inflicted within these limits as may appear to suffice for the ends of discipline.

In explanation of the 3d paragraph, it seems desirable to mention that it is in contemplation to appoint a deputy to every assistant in charge of an office, who will act for the assistant in every instance of his temporary absence. This arrangement will admit of either the assistant or his deputy being constantly in the signal-room. A small staff salary will be attached to the appointment, which will be a stepping-stone to the higher office, and selections for it will be made from among the most steady and trustworthy of the signallers. Meanwhile, in all offices where the appointments of deputies to the assistants in charge have not yet been made, the fines will fall upon the latter.

Government Telegraph Department.

General Branch, Circular No. 130.

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to the Assistant in Charge Office; dated Calcutta, 24 December 1861.

From the numerous errors in the names of persons and places that are constantly occurring, it is believed that the rule laid down in the following circular, issued by Sir W. B. O'Shaughnessy in 1859, has fallen into disuse. The circular is therefore republished, and assistants are requested to be most careful that the instructions therein given are strictly followed in all messages, whether such have been paid for at repetition price or not.

The order must also now be considered as applicable to the case of every word in a message over the correct receipt of which the context offers no check—such, for instance, as *vernacular* words or unusual commercial or technical terms, as "bottomry," "lay days," &c., &c., and to all numbers and dates.

Office Order, No. 588.

With reference to the numerous and discreditable mistakes which still take place in nearly all the offices, in reporting the *names* of *persons* and *places*, it is hereby directed that in future, every *name* in the *address* and *body* of a message shall be repeated back by the receiving signaller, before the message is passed on or sent out to the addressee or issued as public news.

(signed) *W. B. O'Shaughnessy*
Superintendent of Government Telegraphs in India.

Head Office, 1st July 1859.

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Government Telegraph Department.

General Branch, Circular No. 137.

From Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, to the Assistant in Charge   Office; dated Calcutta, 18 February 1862.

It appears that in certain telegraph offices, signallers have been in the habit of receiving fees, for writing out in English the messages of native senders. The practice is most objectionable, and assistants in charge are held personally responsible that no person attached to their offices so employs himself. Senders of messages must have their messages written by other agency than that of the signallers or others attached to the Department.

Government Telegraph Department.

General Branch, Circular No. 140.

From Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, to   ; dated Calcutta, 12 March 1862.

With reference to Circulars Nos. 92 and 93 of 1861, it has been ascertained that it is the practice in some offices to make a quadruple charge for a message received for transmission after 18 h. on Sundays—viz., double for the night charge, and again double the night charge for the Sunday charge. For instance, the cost of a message of 16 words for 400 miles, if sent on ordinary days between 6 and 18 hours, is 1 rupee: such a message was lately tendered for transmission on a Sunday, between 18 and 20 h., to a station within the 400 miles limit, and on this the following charge was made :—

	Rs.	*a.*	*p.*
Message of 16 words - - - - - -	1	–	–
Double for night transmission - - - -	1	–	–
	Rs. 2	–	–
Double for Sunday transmission - - - -	2	–	–
Total - - -	*Rs.* 4	–	–

I am at a loss to understand how the circular above referred to could have been considered to bear an interpretation admitting of such an unreasonable charge. I request therefore it may now be understood that under *no circumstances* can more than double the ordinary price of a message be charged for its transmission, except by the addition of the usual half-rate for repetition, should such be desired by the sender.

Government Telegraph Department.

Instrument Branch, Circular No. 143.

From Lieutenant Colonel *C. Douglas,* Director Genera of Telegraphs in India, to the Assistant in Charge   Office; dated Calcutta, 28 March 1862.

It will be known to all persons in the habit of using Messrs. Siemens & Halske's construction of the Morse instrument, that the relay is not always worked by one and the same battery current, but that the actuating battery differs, depending on whether the working is in S or in T.* Much inconvenience results from this, as each change from S to T work, or *vice versâ,* entails a corresponding change in the relay adjustment of the station with which it is corresponding.

The difficulty may be got over by using the lever of the sending apparatus, instead of the manipulating key, for correspondence in S when the instruments are working in T; but the expedient is inconvenient, unsuited for rapid work, and cannot be made use of when simultaneously working with both the right and left-hand stations.

It need scarcely be observed that the evil mentioned would not exist were the stations right and left alike distant from the intermediate one, and the wire connecting them therewith as well as the number of its supports and the nature of the insulation in each case alike; for then batteries of like strength could be used, whose effect on the distant relays would be alike: nor would it signify were a single battery employed for *both* the instruments in an office as could be done were the resistance of the line on both sides equal and *considerably* greater than that in the battery, which would always be the case with good insulation or in dry weather.

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* By T working is meant that arrangement of the instrument by which a message is passed on automatically from station to station, and which has hitherto been usually referred to in India by the words "working in W." The letter W is the initial of the word "weitertragung" (in English "carrying forward") used by the German makers generally for indicating this class of work. In countries where the French language is spoken the equivalent term "Translation" is used for indicating this class of work; and as its employment has extended to Germany and become almost universal, its initial letter T will in future be made use of in these circulars when referring to this class of work.

In the Morse instrument constructed by Messrs. Digney Freres of Paris, the difficulty is avoided by an improved arrangement of the wires connecting conjugate instruments, by which the battery of the right-hand instrument always works the relay of the right-hand station, whether the work is in S or in T.

It is most desirable that equivalent arrangements should be made for effecting a like object in all the other instruments in use in the Department, and especially in those of Siemens and Halske's construction.

For this object each of the latter class of instrument must be provided with two additional studs, to be marked 3 and 3, and to be arranged as shown in the accompanying scheme —

CZCZEL 33̣22̣11̣

which requires six T connections instead of five as now.

This change can only be properly carried out, however, in departmental workshops, and as opportunities occur; but as a temporary arrangement, the same object may be attained by removing in each instrument the wire which connects the block marked C (the third from the left in the preceding scheme) with the lower end of the pillar on which the lever in its downward motion strikes, and connecting this latter point of one instrument by means of a copper wire with the block marked C (the third from the left) on the other instrument and *vice versâ*.

A sketch accompanies, showing the manner in which the above change has been carried out in certain instruments of Messrs. Siemens and Halske's make, which have at the same time been rearranged with a view to reduce their bulk. In doing this it has been found necessary to separate the terminals into two sets, those for T or translation working being in the front, and those connected with the line, earth, and batteries being placed on the left of the instrument.

Government Telegraph Department.

General Branch, Circular No. 143½.

From Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, to the Directors of Divisions and Superintendents of Circles; dated Calcutta, 2 April 1862.

Whenever a newspaper or other periodical publication containing unfavourable allusions to the action of the Department or of any of its officers is forwarded under existing instructions for the information of the Director General, the usual call for explanation should always be anticipated; and the person forwarding the newspaper should, by the same day's post, forward a letter giving the fullest explanation in his power of the circumstances which may have formed the subject of the unfavourable remarks.

Government Telegraph Department.

General Branch, Circular No. 144.

From Lieutenant Colonel *C. Douglas,* Director General of Telegraphs in India, to
dated Calcutta, 14 April 1862.

An exception will be made to Clause XX.* of the rules of the Department given in the margin, in cases where the signature has been omitted, and it has been afterwards found impossible to make good the omission.

Messages received from passing ships are very likely to be sent without signature, chiefly from ignorance of the rules of the Department by passengers and others, who may probably be arriving in India for the first time. In all such cases the transmission of the message must not be withheld, but it must bear a foot-note as follows;—" Received unsigned." This foot-note must be entered in the fair copy of the message sent out for delivery as a caution to the receiver, and the two additional words must be charged to the receiver of the message.

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* The name of the sender must be written on the face of every message.

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 145.

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to
dated Calcutta, 17 April 1862.

Two messages of the same tenor, but addressed to different parties, were recently received for transmission at the office. After the first message had been signalled, the second was sent on; but instead of transmitting the words in the body of the message *in extenso*, the signaller give the word "Ditto" only.

The destinations of the two messages were in opposite directions, and this improper contraction of the second resulted in its loss; but even had it been delivered, it would of course have been useless.

It is therefore now directed that the practice of abbreviating messages in the manner above shown must not be continued, unless such are directed to be sent as *circular* messages, for which case special arrangements are provided.

The practice of abbreviating *words* must also be discontinued. *All words must invariably be signalled in full.*

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 147.

From Lieutenant Colonel C. *Douglas*, Director General of Telegraphs in India, to
dated Calcutta, 22 April 1862.

COMPLAINTS from senders of messages have of late been frequent regarding discourteous behaviour on the part of assistants in charge of offices. I have reason to believe that the cases represented to me have not been overstated, and that a feeling of indifference to the interests of the public is not limited to assistants in charge, but extends, in some instances, to the higher officers of the Department.

The matter has attracted the attention of Government, and in a letter from the Home Office I have been directed to carefully watch the conduct of *every officer in the Department* in his dealings with the public.

The Government further remarks as follows :—

"It is, in short, the bounden duty of every officer connected with departments like the Post Office and the Telegraph not only to use their best endeavours to serve the public efficiently and accurately, but also to take every pains to satisfy the public that such really is their object and their desire. * * * * * *

"These considerations cannot be too strongly impressed upon all officers, of whatever rank, employed in the Telegraph Department."

Assistants should be aware that the utmost civility and courtesy is required from the person in charge of a signal-office, and that failing in this essential, however valuable an officer may be in other points, he is not fit for office charge. *All grades* may rest assured that any apathy or indifference to the interests of the public that may be brought to notice will most materially prejudice the advancement in the Department of the person concerned.

GOVERNMENT TELEGRAPH DEPARTMENT.

General Branch, Circular No. 148.

From Lieutenant Colonel *C. Douglas*, Director General of Telegraphs in India, to
dated Calcutta, 23 April 1862.

IN cases where it may become necessary to return to the sender a message which has been tendered for transmission, in consequence of illegibility or other causes, a letter (in the form annexed), stating the reason for the return, will invariably accompany such message.

A book containing 100 forms of the above letter will be issued to each signal office of the Department. When indenting for future copies of this form they will be called "Returning Letters."

It is in many signal offices the custom to send written communications on the business of the Department *open*, and the practice is not limited to such communications, but has been extended to telegrams, when under return to the senders for the causes already given. The practice is a breach of Clause XI. of the Telegraph Act, and must not be continued ; and no written communication, however trifling in character, is ever to leave a signal office other than so enclosed as to secure its privacy.

This rule does not apply to such communications by post, on departmental business, as it has hitherto been the custom to send without covers, or in covers open at the end.

Chap. IV.
Electric Telegraph.

(Form.)

GOVERNMENT TELEGRAPH DEPARTMENT.

No. From the Assistant in Charge Office.
To

Dated the of 186

I return the telegram enclosed, for the reasons paritcularised below by No.

I have, &c.
in charge.

1. Your true signature must be given at the foot of the message.

2. Your address should be given at the foot of the message.

3. The address of the person for whom the message is intended should be more precisely given.

4. There is no telegraph office at nor is its position known. Please state this in view to the nearest telegraph office being ascertained.

5. Interruption having been reported between and on the line over which your message should be sent, it is returned. It will be transmitted should you again submit it, and will be passed over the interrupted section by post should telegraph communication meanwhile not have been restored.

6. Your message being to a public officer on your private business, and seeming to require a reply by telegraph, payment for such reply should be deposited and the fact mentioned as the concluding words of your message, thus:—"Reply words deposited." The reply will doubtless be sent by post.

7. Numbers must always be written in full as spoken, thus:—1862 should be written "eighteen hundred and sixty-two."

8. As your message contains numbers, its correct transmission cannot be expected unless the doubles are given thus:—Rupees three hundred and fifty-one; half seven hundred and two.

9. The doubles of the figures in your message require correction.

10. As the offices of the Department are closed on Sundays, Christmas Day, New Year's Day, the Queen's Birth day, and Good Friday, between the hours of 8 and 16 (or 4 P. M.), your $\left\{\begin{array}{l}\text{service}\\ \text{private}\end{array}\right\}$ message cannot be received unless certified by $\left\{\begin{array}{l}\text{yourself}\\ \text{the chief civil officer of the station}\end{array}\right\}$ and admitted by the chief officer of this department on the spot to be of such urgency, that delay in its transmission till 16 hours would injuriously affect the interests $\left\{\begin{array}{l}\text{of the State.}\\ \text{of the person concerned.}\end{array}\right.$

11. The night charge, which is double the day charge, is levied on messages tendered between 18 hours of any day, and 6 hours of the succeeding day. The double or night charge is also made on messages tendered between 6 h. and 8 h., and 16 h. and 18 h. on Sundays, and on the public holidays mentioned under No. 10.

12. The cash sent with your message is insufficient for its payment; the charge under Rules 2, 5, 7, 11, 12, 15, 17 being Rupees annas .

13. If you desire your message to be repeated, the additional charge is 50 per cent. on the day charge for an unrepeated message.

16. Should your message be intended to catch the outgoing mail, you are requested to prefix the words "mail message" to insure its transmission under the "Clear the Line" signal.

17. All messages must be in the English language.

18. No private message or messages exceeding 200 words in all can be sent at one time by the same person or persons.

19. The number of messages on hand being already as great as can be transmitted during the day, your message is refused.

20. Your message, being considered objectionable, cannot be transmitted without the counter signature of the chief European civil officer of the station, or in his absence, that of the chief military officer.

21. It is not stated whether you desire the message to be transmitted as a *private* message, or on the *public service.*

Government Telegraph Department.

General Branch, Circular No. 1, New Series.

Calcutta May 1862.

The following alterations in the revised rules of this Department, dated the 21st December 1859, have received the sanction of Government:—

Sections previous to alteration.	*Sections as now altered.*
XI. Dates are optional, but if given, are charged for word by word.	XI. The day, hour, and minute of receipt of a message into a telegraph office for transmission, is in every instance added by the Department, following immediately the text of the message, and is telegraphed free of charge. Senders may date their messages if they think fit, but the sender's date will be charged for, and will, in view to avoid confusion, if given at the end, be transferred to the beginning of the text of the message.
XXI. When a message is delivered in an unintelligible state, a refund of the cost will be made to the sender, if application be made within two months from the date of despatch, provided the message has been paid for at repetition price.	XXI. When a message is delivered in an unintelligible state, a refund of the cost of the portion rendered unintelligible will be made to the sender, if application be made within three months of the date of despatch, provided the message has not been transmitted beyond the limits of India, its dependencies, or Ceylon; and within six months, in the case of messages for countries beyond India, as Egypt or Europe. Such refunds will be made irrespective of whether the message has been paid for at repetition price or not; but no refund will be given for any error in an unrepeated message arising from wrong figures being given, unless the precaution advised in No. XVI. of these rules shall have been adopted. Refunds on account of messages which have not reached their destination will be made, subject to the above limits as respects time.

(signed) *C. Douglas*, Lieutenant Colonel,
Director General of Telegraphs in India.

APPENDIX (W).

No. 348, dated 28th April 1862.—From the 1st proximo the designations of the "Audit Branch" and "Complaint Office" will be changed into those of "Account Branch" and "Complaint Branch."

No. 349, dated 30th April.—The following Appointments were sanctioned during the Month:—

NAMES.	To what Situation.	Where.	Rate of Pay.	From what Date.	Subject to what Confirmation or Condition.
			Rs.		
F. J. Wray	1st Inspector	Punjab	250	1 April - 1862	
T. L. Hill	2d ditto	Madras	200	1 " - "	
J. H. Kenrick	ditto	ditto	200	1 " - "	
W. Vincent	ditto	Central India	200	1 " - "	
G. Smith	Probationer	Barrackpore School	20	28 Feb. - "	Usual bond.
A. M'Mahon	ditto	ditto	20	28 " - "	
D. Dozey	ditto	ditto	20	15 March - "	
L. Arratoon	ditto	ditto	20	22 " - "	
Bippro Doss Ghose	ditto	ditto	10	27 " - "	
Prosonno Coomar Chuckerbutty.	ditto	ditto	10	27 " - "	
J. H. Radcliffe	ditto	ditto	20	28 " - "	
E. Toogood	ditto	ditto	20	29 " - "	
H. Stevens	ditto	ditto	20	15 " - "	
Thomas Malone	ditto	Futtyghur	20	15 " - "	
Cossim	Native Artificer	Pegu	20	1 " - "	
Kurreem Khan	ditto	Cawnpore	30	17 " - "	
John Byrne	Probationer	Barrackpore School	20	5 April - "	
Anthony Roderick	ditto	ditto	20	5 " - "	
E. Breniffe	4th Inspector	Madras	100	1 March - "	
J. T. Jordan	Head Clerk, Director's Office.	ditto	80	1 April - "	Under the revised scheme of Establishment.
A. Ramma Kristna Moodeliar	Corresponding Clerk.	ditto	50	1 " - "	
T. Kristnasawmy	Assistant Clerk	ditto	30	1 " - "	

NAMES.	To what Situation.	Where.	Rate of Pay.	From what Date.	Subject to what Confirmation or Condition.
			Rs.		
Busseeruddy	Native Artificer	Dacca	16	1 April 1862	Under the revised scale of Establishment sanctioned by Government, one to each office in the Dacca Circle.
Oolfutally	ditto	ditto	35	1 „ - „	
Muffizuddeen	ditto	ditto	20	1 „ - „	
Mohamed Nubbee	ditto	ditto	25	1 „ - „	
— Queah	ditto	ditto	30	1 „ - „	
Jaita Ram	ditto	ditto	25	1 „ - „	
Hamda Yesoo	ditto	ditto	20	1 „ - „	
Sudder Ally	ditto	ditto	20	1 „ - „	
T. Veera Sawmy Pillay	Accountant Superintendent's Office.	Madras	100	1 „ - „	Madras Superintendent's Office Establishments sanctioned by Government in the revised scheme.
T. Raghoo Nudu Pillay	Assistant ditto	ditto	40	1 „ - „	
R. Cunda Sawmy Naidoo	Bill Examiner	ditto	30	1 „ - „	
M. Mangally Pillay	Copying Clerk	ditto	20	1 „ - „	
H. T. Newland	Corresponding Clerk.	ditto	50	1 „ - „	
R. Ruthnavaloo Pillay	Clerk	ditto	30	1 „ - „	
C. Vurdarajaloo Moodeliar	ditto	ditto	25	1 „ - „	
John Platt	Probationer	Jullundur	20	28 Feb. - „	Usual bond.
Richard Gildea	ditto	Umballa	20	9 April - „	ditto.
Francis Doris	ditto	Barrackpore School	20	10 „ - „	ditto.
Banee Madhub Mookerjee	ditto	ditto	10	7 „ - „	ditto.
Toolsee	Native Artificer	Bengal, Allahabad Office	30	27 March - „	Salary includes horse allowance.
Merrie	ditto	Punjab, Lahore Office	30	1 May - „	ditto.
G. B. Adie	Probationer	Barrackpore School	20	29 March - „	Usual bond.
E. J. Dickson	ditto	ditto	20	31 „ - „	
F. A. Williams	ditto	ditto	20	31 „ - „	
Kedar Nauth Neogee	ditto	ditto	10	31 „ - „	
J. M. A. Gueizelar	ditto	ditto	20	1 April - „	
Edmond Paquiet	ditto	ditto	20	1 „ - „	
Gopal Chunder Turfdar	ditto	ditto	10	1 „ - „	
Soshy Bhoosun Laha	ditto	ditto	10	1 „ - „	
Shama Churn Doss	ditto	ditto	10	1 „ - „	
Raj Chunder Roy	ditto	ditto	10	1 „ - „	
G. Rebello	Clerk, Superintendent's Office	Bombay	50	1 „ - „	*Vice* Shamrow Marojee, dismissed.
G. Fernandez	Probationer	Belgaum Office	20	1 May - „	Usual bond.
Khemma	Native Artificer	Indore	50	1 „ - „	Promoted from 40 rupees on Mr. Man's recommendation. Pay includes horse allowance.
Esce Khan	ditto	Dera Gazee Khan	30	6 April - „	Pay includes horse allowance.
D. E. Jolly	Probationer	Barrackpore School	20	9 „ - „	Usual bond.
Joy Gopal Dey	Head Clerk, Office of Director of Eastern Division.	Calcutta	100	20 „ - „	*Vice* Tara Mohun Mookerjee, reduced to second clerk.
Tara Mohun Mookerjee	Corresponding Clerk.	ditto	30	20 „ - „	*Vice* Madhub Chunder Gangooly.
Madhub Chunder Gangooly	Copying Clerk	ditto	30	20 „ - „	*Vice* Mutty Lall Paul, dismissed.
Meah Jan	Native Artificer	Pegu	30	14 „ - „	*Vice* David, dismissed.
R. Francis	Probationer	Rawul Pindee	20	11 „ - „	Usual bond.
G. King	ditto	ditto	20	11 „ - „	ditto.
F. Ashton	ditto	Barrackpore School	20	21 „ - „	ditto.
W. Kelly	Accountant Superintendent's Office.	Scinde, Kurrachee	100	6 August 1861	
D. Grant	Assistant ditto	ditto	30	24 March 1862	Temporarily.
Tattya Dhowndive	Corresponding Clerk.	ditto	40	24 „ - „	
R. Canda Swamy	Accountant Superintendent's Office.	Madras	50	12 Sept. - 1861	Sanctioned up to the 31st of March 1862, the new scale of Establishment coming into operation from 1st April 1862.
R. Vurdia	Storekeeper	ditto	35	12 „ - „	
John Cronin	Probationer	Calcutta	20	28 April - 1862	Usual bond.
John Ainger	ditto	Rawul Pindee	20	18 „ - „	ditto.
R. G. Boyd	ditto	Barrackpore School	20	23 „ - „	ditto.
John Carey	ditto	ditto	20	24 „ - „	ditto.
Patrick McNamara	ditto	ditto	20	24 „ - „	ditto.
John Cahill	ditto	ditto	20	24 „ - „	Pay includes horse allowance.
T. Pinchanada Pillay	Native Artificer	Madras	30	15 „ - „	
Chundra Sacarn Row	ditto	Vellore	30	15 „ - „	
A. Appajee Swamy	ditto	Bangalore	30	15 „ - „	
C. Eswantha Row	ditto	Bellary	30	15 „ - „	
C. Ponrungum	ditto	Mysore	30	15 „ - „	
C. Anuntha Charry	ditto	Ootacamund	30	15 „ - „	
P. Chengleroya Chetty	ditto	Mercara	30	15 „ - „	
M. Negeah	ditto	Cannanore	30	15 „ - „	
J. Roopsing	ditto	Calicut	30	15 „ - „	
R. Narain Swamy	ditto	Cochin	30	15 „ - „	
M. C. Etherajooloo	ditto	St. Thomas' Mount	30	15 „ - „	
J. Sam Sundra Rajoo	ditto	Pondicherry	30	15 „ - „	
C. Strenavasa Charry	ditto	Karical	30	15 „ - „	
N. Ramasawmy Moodilly	ditto	Negapatam	30	15 „ - „	

No. 350, dated 30th April.—The following Alterations in Salaries were directed during the Month:—

NAMES.	In what School or Office.	From	To	From what Date.	Reasons for Alterations.
		Rs.	*Rs.*		
W. K. D. Bignell	Bengal Circle	200	250	1st April 1862	Promotions under the revised scheme of Establishment.
C. H. Malpas	Ditto	150	250	ditto	
H. Hammond	Ditto	200	250	ditto	
M. R. Truman	Dacca	225	250	ditto	
R. D. G. Naylor	Punjab	200	250	ditto	
W. M'Gregor	Ditto	150	250	ditto	
S. Porter	Pegu	150	200	ditto	
T. C. Hill	Ditto	150	200	ditto	
W. M. Eckford	Dacca	150	200	ditto	
R. L. F. M'Mullin	Ditto	100	200	ditto	
A. W. Swaine	Bengal	150	200	ditto	
R. F. Dallas	Punjab	150	200	ditto	
L. V. Fraser	Ditto	125	200	ditto	
W. H. Rees	Ditto	100	200	ditto	
G. G. Charles	Ditto	100	150	ditto	
E. C. Yeatman	Ditto	100	150	ditto	
C. F. Rowband	Ditto	100	150	ditto	
C. R. G. Gibson	Ditto	100	150	ditto	
J. G. Cairns	Ditto	100	150	ditto	
J. W. Grinnol	Bengal	125	150	ditto	
E. T. P. Biddulph	Ditto	100	150	ditto	
R. F. Parsons	Central India	150	250	ditto	
F. F. Babington	Ditto	150	250	ditto	
W. Evans	East Coast	175	200	ditto	
G. Richardson	Ditto	150	200	ditto	
T. Blissett	Madras	150	200	ditto	
G. A. Goslin	East Coast	100	200	ditto	
J. E. Seppings	S. E. Coast	100	200	ditto	
C. Duffin	Ditto	100	200	ditto	
E. Faulkner	Madras	100	150	ditto	
W. B. O'Brien	Indore	100	200	ditto	
C. H. Johnstone	Scinde	100	150	ditto	
W. J. C. Westaway	Ditto	100	150	ditto	
R. Madras	Meerut School	30	40	15 August 1861	Receiving 12 words per minute, and being fit for office duty.
J. Percy	Ditto	30	40	15 June „	
G. Daly	Ditto	30	40	15 „ „	
C. Brawley	Ditto	30	35	15 August „	
W. Stifle	Ditto	30	35	15 „ „	
P. Roberts	Ditto	30	35	15 March „	
G. Smith	Barrackpore School.	20	25	1 April 1862	Receiving six words per minute.
A. M'Mahon	Ditto	20	25	15 „ „	
J. H. Radcliffe	Ditto	20	25	15 „ „	
G. Smith	Ditto	25	30	15 „ „	Receiving 12 words per minute, and being fit for office duty.
R. D. Mitchell	Belgaum Office	20	25	1 „ „	Receiving six words per minute.
Ditto	Ditto	25	30	1 May „	Receiving 12 words per minute, and being fit for office duty.
D. Whelan	Ditto	20	25	1 „ „	Receiving six words per minute.
E. High	Ditto	20	25	1 „ „	
G. Fernandez	Ditto	20	25	1 „ „	
F. A. Williams	Barrackpore School.	20	25	2 „ „	ditto.
E. J. Dickson	Ditto	20	25	2 „ „	
D. Dozey	Ditto	20	25	2 „ „	

No. 351, dated 30th April.—The following Transfers were sanctioned during the Month :—

NAMES.	Rank.	From		To		From what Date.	REMARKS.
		Circle.	Station.	Circle.	Station.		
P. C. O'Rielly	Signaller	Madras	Pondicherry	S. E. Coast	Paumben	10 Feb. 1862	To the charge of the office.
J. McLean	ditto	Bengal	Benares	C. India	Mirzapore	12 ,, ,,	
J. Thummiah	ditto	Madras School		Madras		1 March ,,	
T. Blissett	2d Inspector	Madras		East Coast	Vizagapatam	11 April ,,	
G. G. Charles	3d ditto	Punjab	Delhi	Bengal	Burhee	17 ,, ,,	To the charge of the office.
L. Wolff	Assistant in charge.	Bengal	Burdwan	E. Division	Barrackpore School.	4 ,, ,,	*Vice* Mr. B. Ffinch. He will also hold charge of the Barrackpore Signal office.
G. Smith	Probationer	Barrackpore School		Bengal	Calcutta	15 ,, ,,	
A. E. Carey	Signaller	Bombay	Bombay	Indore	Nassick	10 ,, ,,	
J. Fullam	ditto	ditto	ditto	ditto	ditto	10 ,, ,,	
J. Hill	ditto	ditto	ditto	Scinde	Kurrachee	10 ,, ,,	
C. O. D'Silva	ditto	ditto	ditto	ditto	ditto	10 ,, ,,	

No. 352, dated 30th April.—The following Changes were sanctioned during the Month :—

NAMES.	Rank.	Circle.	Where from.	Where to.	From what Date.	REMARKS.
J. W. Caston	Signaller	C. India	Mirzapore	Rewah	9 Feb. 1862	To the charge of the office.
J. Draper	ditto	ditto	Rewah	Mirzapore	11 ,, ,,	Removed from charge of the office for mismanagement.
S. Pettigrew	Artificer	Madras	2d Division Line	3d Division Line	8 ,, ,,	These changes were necessary on the abolition of the Bangalore Workshop.
E. Faulkner	3d Inspector	ditto	Bangalore Workshop.	2d ditto	8 ,, ,,	
M. Brookes	Signaller	ditto	Bangalore	Seera	13 ,, ,,	His travelling expenses will not be borne by Government, Signaller Brookes being sent to replace another signaller who had obtained leave.
Vencatachellum	ditto	ditto	Seera	Bellary	17 Mar. ,,	
J. Wisken	ditto	ditto	Training school	Pondicherry	5 Feb. ,,	To the charge of the office.
W. B. Castello	3d Inspector	ditto	Madras	3d Division Line	4 ,, ,,	
C. Jelly	Signaller	ditto	Seera	Bangalore	10 Mar. ,,	In consequence of the closing of the Seera office.
G. Tate	ditto	ditto	ditto	ditto	16 ,, ,,	
M. Brookes	ditto	ditto	ditto	Bellary	10 ,, ,,	
A. Mollan	ditto	ditto	ditto	Bangalore	10 ,, ,,	
A. Judge	ditto	Bengal	Allahabad	Benares	1 ,, ,,	At the expense of the parties concerned.
W. Spratt	ditto	ditto	Benares	Allahabad	1 ,, ,,	
T. Freeman	ditto	ditto	Calcutta	Burdwan	20 ,, ,,	
H. Flemming	ditto	ditto	Burdwan	Calcutta	18 ,, ,,	
N. B. Daly	ditto	ditto	Dehree	Benares	11 ,, ,,	For the benefit of his health and at his own expense.
W. Judge	ditto	ditto	Raneegunge	Calcutta	30 ,, ,,	
G. Soobra Monyer	ditto	Madras	Bellary	Vellore	1 April ,,	
J. Ashworth	ditto	ditto	Bangalore	Madras	15 Sept. ,,	At their own expense.
A. Mergler	ditto	ditto	Madras	Bangalore	11 ,, ,,	
T. Blissett	2d Inspector	ditto	Bangalore	Madras	27 ,, ,,	*Vice* W.W. Biddulph, on sick leave.
J. W. Jordan	Artificer	ditto	1st Division Lines	2d Division Line	1 Oct. ,,	*Vice* Wayne, deceased.
J. Owen	Mtd. Artificer	ditto	2d Division Vellore.	W. C. Line	30 Nov. ,,	*Vice* Paul, dismissed.
W. H. Taylor	Signaller	C. India	Kurnool	Hyderabad	1 April ,,	At his own expense. This cancels the unexpired portion of his sick leave.
J. R. H. Lynch	ditto	Bengal	Kedgeree	Calcutta	9 ,, ,,	
R. D. Ghose	ditto	ditto	Mud Point	Kookrahatty	18 ,, ,,	

No. 353, dated 30th April.—The following Leaves were sanctioned during the Month.

NAMES.	Rank.	Circle.	From what Date.	For what Period.	Nature and Condition of Leave.
A. Lynch	Signaller	Bengal	9 March 1862	1 week	On private affairs, full pay.
Wooma Churn Chatterjee	Asst. in charge	ditto	12 „ „	5 days	ditto - ditto.
Ram Doyal Ghose	Signaller	ditto	18 „ „	1 month	Privilege.
F. Bouchez	Asst. in charge	ditto	22 „ „	1 „	ditto.
W. Juden	Signaller	ditto	28 „ „	4 days	ditto.
H. Dodd	ditto	ditto	1 „ „	4 months	Sick, half-pay.
Prosono Coomar Banerjee	ditto	ditto	31 „ „	1 month	ditto.
J. Wisken	ditto	Madras	17 „ „	12 days	On urgent private affairs.
C. T. Jelly	ditto	ditto	13 February „	6 weeks	Sick, half pay.
C. Shummoogum	Clerk	ditto	4 March „	2 months	On private affairs, full pay.
W. H. Taylor	Signaller	C. India	4 „ „	3 „	Sick, half-pay.
J. S. Pinto	ditto	ditto	4 „ „	3 „	
C. Rajunthram	ditto	East Coast	11 „ „	1 month	Privilege, full-pay.
W. W. Biddulph	1st Inspector	Madras	24 „ „	6 months	Sick. Extension of six months' previous leave by the Secretary of State for India, half-pay.
C. Duffin	2d ditto	S. E. Coast	15 January „	4 „	Sick leave to Ootacamund, half-pay.
A. Mergler	Signaller	Madras	1 April „	1 month	Privilege, full-pay.
J. Lewis	ditto	ditto	12 „ „	1 „	
W. Shave	ditto	Bengal	9 March „	4 days	On medical certificate, half-pay.
S. Otley	ditto	ditto	6 „ „	26 „	

No. 354, dated 30th April.—The following Casualties occurred, or were reported during the Month.

NAMES.	Rank.	Station or Office.	Circle.	Nature of Casualty.	Date of Occurrence.	Remarks and Reasons.
Womes Chunder Chatterjee.	Compositor	Printing Office	-	Dismissal	1 April - 1862	For absenting himself for 17 days, without leave.
T. W. Thompson	Signaller	Mirzapore	C. India	Resignation	1 February „	To forfeit arrears of pay for leaving without giving the usual notice.
Lewis Brett	ditto	Bombay	Bombay	Dismissal	8 „ „	Habitual misconduct.
D. Sealy	ditto	ditto	ditto	Resignation	31 March „	
J. L. Collins	Artificer	Beora	Indore	Dismissal	7 April „	For assault on a Bazar Bunniah in Beora, and for previous misconduct.
S. Roberts	Signaller	Agra	Bengal	Resignation	19 „ „	
J. C. Hepburn	ditto	Allahabad	ditto	ditto	19 „ „	Declared ineligible for re-employment.
W. Smith	ditto	Karical	Madras	Dismissal	25 January „	For habitual drunkenness, insubordination, and neglect of duty.
J. L. Platel	Accountant	Cochin	ditto	Resignation	31 March „	
E. T. Wrightman	Signaller	Bangalore	ditto	ditto	27 „ „	
A. Veraswamy	ditto	Nellore	E. Coast	ditto	1 „ „	
R. Dalgairns	Clerk, Supdt.'s Office.	Madras	Madras	Services dispensed with.	31 „ „	
W. C. Ready	Signaller	Delhi	Punjab	Dismissal	10 February „	For using vulgar and abusive language at the instrument, and for habitual misconduct.
D. Buckley	Md-Artificer	Madras	Madras	ditto	21 April „	Neglect of duty.
J. W. Winter	ditto	ditto	ditto	Death	29 March „	
Veerasawmy Rajoo	Attender	ditto	ditto	Services dispensed with.	30 April „	
D. Coles	Signaller	Indore	Indore	Dismissal	21 „ „	Inefficiency, and physical unfitness.
Shamrow Marojee	Clerk. Supdt.'s Office.	Bombay	Bombay	ditto	31 March „	Habitual absence without leave.
W. Lee	Signaller	Kurrachee	Scind	ditto	5 April „	For mis-appropriating the cash collections.
M. Naguppa	ditto	ditto	ditto	ditto	5 „ „	
H. Maher	4th Inspector	Buddeena	ditto	Death	4 „ „	Dysentery.
Mutty Lall Paul	Clerk, Office of Director, East Division.	Calcutta	-	Services dispensed with.	20 „ „	
David	N. Artificer	Pegu	Pegu	Dismissal	14 „ „	Drunkenness, impertinence, and insubordination.
W. Finch	Artificer	Dacca	Dacca	ditto	1 May „	For absenting himself from duty for one month, without leave, and for reporting himself when in a state of intoxication.

No. 355, dated 30th April 1862.—With reference to Order No. 350, and for convenience of reference, the 1st, 2d, and 3d Inspectors stood on the 1st April as follows:

(It has not been considered necessary to give the List of Names here.)

No. 356, dated 30th April.—The following Orders affecting the Department were published in the "Calcutta Gazette" during the Month of 1862 :—

Date of Gazette.		Number of Order.	Date of Order.		Text of Order.
Month.	Date.		Month.	Date.	
1862.			1862.		
April - -	2 -	1667 -	March -	29 -	*Appointments.*—To be Assistant Superintendent in the Telegraph Department. Mr. T. R. M. Beuce. „ C. T. M. Naylor. „ P. Lonergan. „ W. St. Albin. „ W. R. Brooke. „ R. B. Flindell. „ C. B. P. Gordon. „ W. S. Stuart. „ J. S. Harris. „ B. F. Finch.
					Appointments :
Ditto - -	23 -	2031 -	Ditto - -	22 -	Mr. T. R. M. Bence, to be a Superintendent. Mr. J. E. Todhunter, to be an Assistant Superintendent.

CHAPTER V.

Chap. V.
Marine.

MARINE DEPARTMENT.

ANNUAL REPORT of the Branch of the Marine Department under control of the Government of India, for the Year 1861-62.

SEA-GOING STEAMERS.

The sea-going steamers attached to this Presidency on the 30th April last, were six in number, as named in the margin.

——	Tons.	Horse-power.
Australian	1,459	300
Sydney -	1,459	300
Arracan -	1,099	220
Nemesis -	400	120
Pluto - -	450	100
Prosperine	308	90

The steamer "Bentinck," purchased on account of the Imperial Government has been dismantled, and is now being converted into a Hospital ship for sick soldiers, under the sanction of the Government of India. It is intended to moor the "Bentinck" at Kedgeree, in order that the invalids who may resort to her shall derive the full advantages of the sea-air.

The condition of the various vessels is reported upon in statement of Floating Stock in the Appendix.

The following is a summary of their employment:—

"Australian."

This vessel during, during the months of May and June, was engaged in conveying the Honourable Samuel Laing to Port Blair and Penang, and for the remainder of the official year has been undergoing repairs.

"Sydney."

This vessel was under repairs from May to December 1861. In the latter month she proceeded with Ordnance stores, &c., to False Point, from thence to Madras, and was subsesequently employed as follows:—January 18th, left Madras, for Rangoon, with a Detachment of Her Majesty's 60th Rifles, with the "Sesostris" in tow, arriving there on the 27th January. February, 4th, left Rangoon with a detachment of Her Majesty's 69th Regiment, and "Sesostris" in tow, and arrived at Madras on 9th February. February 15th, left Madras with a detachment of Her Majesty's 43d Regiment, and "Sesostris" in tow, arriving at Calcutta on the 21st idem. February 28th, left Calcutta, with "Sesostris" in tow, casting off the latter vessel at Coconada on the 5th March, and arriving at Madras on the following day. March 10th, left Madras with Sir William Denison and suite for Negapatam, arriving there on the 11th March. March 14th, left Negapatam with the Governor and commissariat stores, and arrived at Madras on the 15th idem. March 18th, left Madras with stores, baggage, and passengers, and arrived at Coconada on the 19th idem. March 21st, left Coconada, for Rangoon, with a detachment of the 28th Madras Native Infantry, and with "Sesostris" in tow, but encountering a gale cast off the latter vessel before making port. Arrived at Rangoon on the 28th idem. March 30th, left Rangoon and proceeded to sea in search of the "Sesostris," returning on the 2nd April. April 10th, left Rangoon with a detachment of the 52d Madras Native Infantry, with "Sesostris" in tow, arriving at Madras on the 16th idem. April 20th, left Madras with passengers, and arrived at Calcutta on the 22nd idem.

"Arracan."

The "Arracan" has been employed as follows:—May 2d, left Penang for Madras, with the "Tubal Cain" in tow. May 20th, left Madras for Coconada, with 418 men, women, and children of the Madras Engineers on board, arriving there on the 21st idem. May 2d, left Coconada, and arrived at Calcutta on 25th May. October 13th, left for Callegouk, having been placed at the disposal of the Public Works Department, for service at the Alguada Reef Works, under the orders of Captain A. Fraser, the Superintendent, where she has been employed in keeping up communication between Moulmein and the Reef, and in conveying stores, workmen, &c., to and from the latter place; she has continued on this service up to the end of the year.

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Marine.

"Nemesis."

This vessel has been employed as follows:—May 2d, left Tavoy for Moulmein, with Commissioner on board, returning from circuit duty. May 13th, left Moulmein for Callegouk, Tavoy, Mergui, and Port Blair. May 25th, returned to Moulmein, having put back through stress of weather. June 16th, towed the "Sesostris" to sea, and having landed 99 stone-cutters with their stores at Callegouk, proceeded towards Tavoy and Mergui. July 15th, left Moulmein for Tavoy and Mergui (touching at Callegouk) with a detachment of troops for each station. July 21st, left Mergui for Tavoy with a detachment of troops on board. July 23d, left Tavoy for Moulmein (touching at Callegouk) with a detachment of troops. August 15th, left Moulmein with "Sesostris" in tow, and having cast her off the same day, outside Amherst, proceeded to Callegouk, Tavoy, and Mergui. August 23d, left Mergui for Tavoy, Callegouk, and Moulmein with Commissariat stores, &c. September 30th, left for Shoaygoon with Commissioner on board. October 15th, left Moulmein for Port Blair. November 2d returned to Moulmein. November 12th, left for Port Blair, with 71 convicts on board for that settlement, calling at Tavoy. November 19th, left for Mergui and Callegouk, conveying 41 sick men from Port Blair to Moulmein. December 12th, left for Port Blair. December 17th, returned to Moulmein *viâ* Mergui, Tavoy, Callegouk. December 31st, towed "Mutlah" to sea. January 1st, returned to Moulmein. January 16th, left for Port Blair, calling *en route* at Callegouk, Tavoy, Mergui. January 29th, left for Moulmein, calling at Callegouk. February 5th, left for Port Blair, Mergui, and Tavoy, with Commissioner on circuit duty. February 15th, left for Moulmein *viâ* Callegouk, with shipwrecked crew of the "Queen of the South." February 23d, left Tavoy for Moulmein, with Commissioner on board. March 22d, left Moulmein for Southern Provinces, with the Commissioner on board. April 25th, returned to Moulmein. May 1st, left for Port Blair, with 200 convicts.

"Pluto."

The "Pluto" has been employed as follows:—May 5th, left Akyab with mails, passengers and cargo on board for Kyouk Phyoo, returning from the latter port on the 7th. May 10th, left Akyab on the same service for Chittagong, returning on the 14th idem. June 3d, left for Kyouk Phyoo, but put back from stress of weather. June 15th, left Akyab for Kyouk Phyoo, with mails, &c., on board, returning on the 18th. June 21st, left Akyab for Chittagong on the same service. June 26th, left Chittagong for Burrisal with 1st Regiment of Bengal Military Police for conveyance to Calcutta. June 30th, left Burrisal for Chittagong, touching at Akyab. July 5th, left Chittagong for Akyab with mails, &c. July 12th, left Akyab on the same service for Kyouk Phyoo, returning on the 15th idem. August 6th, left Akyab for Kyouk Phyoo with mails, &c., returning on the 8th idem. August 10th, left Akyab on the same service for Chittagong, returning on the 15th idem. August 23d, got up steam and went out to pick up cargo-boats which had got adrift and gone to sea, and returned to Akyab on the 26th idem. September 10th, left Akyab for Chittagong, carrying mails, &c., and returned on the 15th idem. October 5th, left Akyab for Kyouk Phyoo, returning on the 8th. October 9th, left Akyab with mails, &c., for Chittagong, returning on the 15th idem. October 23d, left for Kyouk Phyoo on the same service. October 24th, left Kyouk Phyoo with troops on board for Sandoway, returning to the former port with the mails on the 29th idem. October 31st, left for Akyab on the same service. November 1st to 6th, employed in laying telegraph cable from Akyab to Borongo Island. November 11th, left Akyab with mails, &c., for Chittagong, returning on the 18th idem. November 23d, towed in the Government brig "Mutlah" from sea. November 27th, left Akyab for Chittagong with passengers, &c., returning on the 1st December. During the months of December, January, February, and March engaged exclusively in carrying mails, &c., between the ports of Akyab, Kyouk Phyoo, Chittagong, and Sandoway, returning to Akyab with troops, &c., on the 2d April. April 3d, left Akyab to fit a beacon on Oyster Island, and returned on the 6th idem. During the rest of the month engaged in the conveyance of mails, &c., between the above-mentioned ports.

"Proserpine."

This vessel was put out of commission on the 6th of May 1861, and was not employed till April 1862.

SAILING TRANSPORTS.

"Tubal Cain,"
"Sesostris,"
"Walter Morrice."

The sailing transports attached to this Presidency on the 30th April last, were three in number, as named in the margin.

"Tubal Cain."

This vessel was at Penang on the 1st of May. May 2d, left Penang, with 22d Native Infantry, in tow of "Arracan," and arrived at Madras on the 14th idem. May 22d, left Madras and arrived at Calcutta on the 27th idem. June 10th, left Calcutta with 206 convicts, Commissariat stores, and cattle, and arrived at Port Blair on the 29th idem. July 13th, left Port Blair with released convicts and condemned Commissariat stores, arriving at Calcutta on the 23d idem. August 18th, left Calcutta with 6th Company, Naval

Brigade, and arrived at Amherst on the 28th idem. September 1st, left Amherst with mails, stores, Andamanese, and 23 carpenters, arriving at Port Blair on the 12th idem. September 20th, left Port Blair with mails, arriving at Moulmein on the 30th. October 10th, left Moulmein, with the 32d Native Infantry, in tow of the steamer "Dalhousie" arriving at Masulipatam on the 18th idem. October 25th, left Masulipatam for Rangoon, arriving there on the 19th November. December 1st, left Rangoon with the 33d Native Infantry, and arrived at Madras on the 9th December. December 24th, left Madras with Commissariat stores, and arrived at Calcutta on the 17th January. February 1st, left Calcutta, arriving at Madras on the 12th idem. February 20th, left Madras, with the left wing of Her Majesty's 3d Battalion, 60th Rifles, in tow of the "Coromandel," and arrived at Rangoon on the 28th idem. March 20th, left Rangoon, with the left wing of Her Majesty's 69th Regiment, in tow of the "Coromandel," arriving at Madras on the 28th idem. April 4th, left Madras for Negapatam, leaving that port on the 10th with Commissariat stores for Madras, where she arrived on the 11th idem. April 17th, left Madras, arriving at Masulipatam on the 18th, proceeding thence to Calcutta with porter, &c., arriving there on the 30th idem.

"Sesostris."

This vessel was at Moulmein from the 2d to the 6th May. May 7th, left Moulmein, with 31st Regiment Madras Native Infantry, in tow of steamer "Dalhousie," and arriving at Calingapatam on the 14th idem. May 16th, left Calingapatam and arrived at Moulmein on the 22d idem. June 27th, left Moulmein and arrived at Rangoon with Commissariat stores on the 21st idem. July 12th, left Rangoon and arrived at Moulmein on the 18th. August 15th, left Moulmein with Ordnance stores, and arrived at Rangoon on the 22d August. October 2d, left Rangoon, with the 42d Madras Native Infantry, in tow of the steamer "Coromandel," arriving at Masulipatam on the 9th of October. October 15th, left Masulipatam and arrived at Madras on the 18th idem. October 22d, left Madras, with Her Majesty's 43d Light Infantry, in tow of the "Coromandel," and arrived at Calcutta on the 28th idem. November 13th, left Calcutta with a party of the Naval Brigade, cattle, Commissariat stores, &c., and arrived at Port Blair on the 1st December. December 12th, left Port Blair with a party of the Naval Brigade and convicts, and arrived at Rangoon on the 24th December. January 3d, left Rangoon with the 33d Madras Native Infantry, and arrived at Madras on the 11th idem. January 18th, left Madras, with Her Majesty's 60th Rifles, in tow of the "Sydney," and arrived at Rangoon on the 27th idem. February 4th, left Rangoon, with Her Majesty's 69th Regiment, in tow of the steamer "Sydney," and arrived at Madras on the 9th idem. February 15th, left Madras, with Her Majesty's 43d Regiment, in tow of the "Sydney," and arrived at Calcutta on the 21st idem. February 28th, left Calcutta with iron, in tow of the "Sydney," and arrived at Coconada on the 5th March. March 21st, left Coconada for Rangoon, in tow of the "Sydney," with the 28th Madras Native Infantry, but encountering a gale, the tow was cast off; continued the voyage under sail, and arrived at Rangoon on the 2d April. April 10th, left Rangoon with the 52d Madras Native Infantry, in tow of the "Sydney," and arrived at Madras on the 16th idem. April 20th, left Madras, and arrived at Calcutta on the 25th idem.

"Walter Morrice."

This vessel was lying at Port Blair, Andamans, from 1st May to the 5th October as a store and guard ship. October 6th, left Port Blair with 59 men and three officers of the Indian Naval Brigade, and 24 discharged convicts, arriving at Calcutta on the 20th idem, when she was put out of commission, and transferred to the Master Attendant's Department.

SURVEYING VESSELS.

"Krishna" and her tender "Minx."

The "Krishna," under the command of Lieutenant Jackson, Indian Navy, with her tender "Minx," has been employed during the past year on surveys of the coast of Queda, the north entrance to Penang harbour and the Cocos channel. The survey of the Cocos channel was relinquished on the 4th February, in consequence of the crew refusing to do further duty, owing to the expiration of the term for which they had signed articles of agreement. The vessels proceeded to Calcutta, where they arrived on the 17th of the same month. In compliance with a recent order of the Home authorities, under which all future surveys are to be conducted exclusively by vessels of the Indian Navy, both vessels were dismantled and put out of commission, and Lieutenant Jackson's services placed at the disposal of the Government of Bombay.

KIDDERPORE DOCKYARD.

Naval Storekeeper.
Builder and Surveyor.

In accordance with a resolution of the Government of India, dated May 15th, 1861, the dockyard, consisting of the Departments named in the margin, has been re-organised at an increased cost of 2,065 rupees per month. Under this resolution, a superintendent was appointed, with control over every Department of the dockyard and the river vessels.

Chief Superintending Engineer.
Inland Steam Department.

The office of the Superintendent of Marine being abolished, the Secretary, Captain H. Howe, was appointed Superintendent of the Dockyard; but before he could take up this appointment he was nominated to officiate as Master Attendant. It was, however, considered that he was the best fitted to inaugurate the new office and, without prejudice to his officiating appointment, he accordingly took charge of the dockyard on the 17th June.

On the 1st June, the Clerk of the Boat Office, with his establishment, was removed to the dockyard, and his designation changed to that of Assistant Superintendent of the Dockyard; but his duties remained in most respects the same.

Captain Howe made over charge of the dockyard to Captain D. Tapley on the 18th November, and on the 9th April the latter officer resigned the appointment, having obtained leave to England on medical certificate. The Assistant Superintendent conducted the duties up to the 25th April, when Captain G. J. Niblett assumed charge.

With the exception of the new arrangement of indenting for stores upon the Commissariat, which requires some alterations before it can work satisfactorily, the general working of the new system introduced into the dockyard has been found to be advantageous, and in many respects superior to the old.

During the year the sea-going steamer "Sydney" has been thoroughly repaired and her boilers have been renewed by others made at the dockyard.

The "Australian" is undergoing a thorough repair, and will shortly be ready to receive her new boilers which are expected from England.

NAVAL STOREKEEPER'S DEPARTMENT.

On the re-organisation of this Department, the books of the Naval Storekeeper (owing to the great accumulation of stores, the complication and confusion of the accounts and other causes) were found to be greatly in arrears. To render every assistance for the bringing up of arrear work, Captain Tapley detached the head clerk of his office, and two assistants, for duty on the Storekeeper's books; but the present Acting Superintendent of the Dockyard has expressed it as his opinion that the arrears in question are still of such magnitude as to demand a separate establishment to clear them off, without which, the Naval Storekeeper's Department being heavily tasked with current work, he anticipates they must remain in arrear for an indefinite period.

A detailed statement of floating stock reporting the condition of the various vessels under the Government of India, as standing in the Naval Storekeeper's books on the 30th April 1862, is attached.

SURVEYOR AND BUILDER'S DEPARTMENT.

The working of this Department, under the superintendence of Mr. J. Cranston, has been generally satisfactory, and calls for no special remark. Attention, however, has been drawn to the large sums Government is called on to pay for the docking of its vessels by private parties. The "Bentinck," the "Sydney," and the "Arracan" have been docked during the year at Howrah at a cost of 10,904 rupees, and a further expense is being incurred for the docking of the "Australian." This heavy expense, the Superintendent represents, might be in a great measure avoided by lengthening one of the Kidderpore docks sufficiently to adapt it for the reception of any of the larger Government vessels.

A difficulty is at present experienced in obtaining the services of good and efficient workmen for the Department, owing to the enhanced rate of labour in Calcutta. The best men, it is represented, are not obtainable for a rate of pay below that which good men can readily obtain elsewhere, and a revision of the rates is consequently considered necessary to maintain the efficiency of the Department.

CHIEF SUPERINTENDING ENGINEER'S DEPARTMENT.

During the year, two large and commodious sheds, covered with corrugated iron roofing, have been erected by the Public Works Department in the steam factory, for the purposes of boiler making, repairing, and the accommodation of the new steam-hammer. This invaluable machine, purchased so far back as February 1838, is now firmly erected on a substantial and solid built foundation, and will prove a great acquisition to the steam factory appliances in turning out heavy forged work.

The total quantity of iron castings turned out during the year amounts to 1,018 cwt.; these have been manufactured at the very reasonable cost, including all charges, of 6 rupees per cwt.; this is a very low figure, compared with that for the manufacture of the like material by private engineering firms in Calcutta, whose charges vary from 10 to 14 rupees "per maund," or from 15 to 20 rupees per cwt.; a striking contrast, illustrative of the necessity of providing this branch of the public service with efficient means and appliances.

The total quantity of brass castings turned out during the year amounts to 116 cwt., at an average cost of 60 rupees per cwt., being about 50 per cent. less than the current bazaar rates for castings of a similar description.

The turnery, fitting, and smithy departments have been kept well and steadily employed, and continue to be worked under similar advantages of economy.

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Marine.

ENGINEER'S APPRENTICE SCHOOL.

A statement of the number of pupils that attended the school during the year is shown in the margin.

Second class,	3
Third ,,	4
Fourth ,,	4
Fifth ,,	3

The Superintendent of the Dockyard reports that this school costs 1,200 rupees per annum for instruction only, and that very few of the apprentices attend it. The Chief Superintending Engineer recommended its abolition on the occasion of submitting the last annual report of his Department, a recommendation which has been referred for the consideration and orders of the Government of India.

INLAND NAVIGATION DEPARTMENT.

The Assistant Superintendent of the Dockyard is at the head of this Department, which was designated under the old arrangement, "The Government Boat Office."

There are at present seven inland steam vessels, and nine flats and troop-boats, in commission. Their condition is generally good. Two of these steamers, with a flat each, are intended for service in Assam. The aggregate carrying capacity of the flats is about 1,800 tons. To these will be soon added one of Winter's new steel barges, of about 400 tons, now being strengthened.

The steel steamer "Spey" is having her machinery fitted for river service.

The steamer "Koel" has been lengthened 47 feet, and is expected to be ready for service in August of the ensuing official year.

The "Myou," a small ferry steamer, was placed at the disposal of the Dacoity Commissioner of Hooghly in November last. The No. 4 screw gun-boat is laid up in Tolley's Nullah, and is available for service.

The "Rajshaye" has been employed as a ferry-boat at Caragolah.

The "Patna" and "Benares" steamers, built in the dockyard in 1856-57 as ferry boats, were brought into service during the mutiny as gun-boats. They returned to Calcutta in August and September 1859, and have only been occasionally used since. They are now laid up in Tolley's Nullah, and have been recommended for sale by the Superintendent of the Dockyard, as their want of power renders them in a great measure useless.

The "Teaknaaf," sister vessel to the "Myou," also lying in Tolley's Nullah, requires to be thoroughly repaired, and has also been recommended for sale.

The "Sir Henry Lawrence" has been condemned as a steamer, and her engines have been sold.

The "Mechanic" has also been condemned, and is to be disposed of.

The troop-boats and flats in commission named in the margin, are all in good condition, with the exception of the "Gomtee," the hull of which vessel is much worn.

Dallah.
Gogra.
Konai.
Goomtee.

Gunduck.
Barges,
1, 2, 3, & 4.

The boats out of commission, which remain to be noticed, are specified in the margin.

Matabanga.
Isla.
Tummel.

Winter Boats,
Nos. 3 & 4.

The hull of the "Matabanga" is much worn, but she is a useful boat for transporting a small number on an emergency, and being a troop-boat, her decks are well protected from the weather. The remaining four vessels are the new steel barges, one of which, the "Isla," it is intended to strengthen.

The State yacht, "Soonamookey," and her attendant bholeahs and row-boats are in good condition, although some of the boats are very old.

TRANSPORT DEPARTMENT.

A statement showing the vessels that have arrived during the year with troops from the Home authorities, as also the ships engaged at Calcutta, for the conveyance to England of invalids, time-expired, and discharged men, is given below:—

From England to Calcutta.

Names of Vessels.	Officers.	Men.	Women.	Children.
Surrey - - - - - -	3	103	15	9
Viscount Canning - - - -	- - -	5	4	1
Holmsdale - - - - -	16	263	33	43
Sydenham - - - - -	6	362	22	13
Middlesex - - - - - -	14	315	17	15
St. Lawrence - - - - -	4	78	11	13
Adamant - - - - - -	5	285	1	—
Warrior Queen - - - - -	10	301	25	20

From Calcutta to England.

Names of Vessels.	Officers.	Invalids.	Men in health.	Women.	Children.
Marseilles - - - - - -	5	24	84	4	4
Indiana, S. S. - - - -	1	- -	12	19	19
Hydaspes, S. S. - - - -	2	- -	59	3	1
Renown - - - - -	4	- -	208	4	5
Lady Jocelyn, S. S. - - -	5	137	39	8	17
Holmsdale - - - - -	4	126	58	15	22
New Castle - - - - -	4	116	57	23	31
Middlesex - - - - -	6	154	25	12	16
Champion of the Seas - - -	23	0	474	9	20
Agamemnon - - - - -	4	141	32	7	9
Malabar - - - - - -	9 5 Staff Sergeants	- -	283	16	17
Salamanca - - - - -	5	- -	128	8	10
Dartmouth - - - - - -	7	- -	270	14	20
Ellenborough - - - - -	4	83	86	11	14
Aliquis - - - - - -	6	27	207	16	29

MARINE DEPARTMENT, PEGU.

The flotilla on the Irrawaddy, under the superintendence of Captain A. Brooking, consisted, on the 30th April 1862, of the following vessels:—

"Lord William Bentinck," steamer.
"Damoodah," - - - „
"Mahanuddy," - - „
"Nerbudda," - - „
"Diana," - - - „
"Panlang," - - troop boat.
"Sutlej," - - - „
"Bhagerutty," - - „
"Actæon," - - - „
"Kelpie," - - gun boat.
"Gallant," light vessel, with boats attached.
"Wasp," cargo boat.
"Kate," buoy vessel.
"Punt," ditto.
"Superintendent," Indus flotilla's Bholeah.
Port cutter and gig of Master Attendant, Rangoon.
Ditto of ditto, Bassein.
Chief Superintendent Engineer's and Government Builder's gigs.
Two cargo boats.
Three cutters attached to Naval Yard.
Thirteen boats attached to vessels of the flotilla.

The vessels of the flotilla have been employed as follows:—

In conveying mails, Government and private stores; in effecting relief of troops at Bassein and the Frontier; in the transfer of troops and conveyance of stores from Meaday to Thyet Myoo, on the former station being abandoned; on special duty, under the orders of the Pegu division, to Bassein; under the orders of the Executive Engineers for the inspection of the beacons at the entrance of the river; and of the Master Attendant in the examination and laying down of the buoys and moorings, and inspection of the channel. They have also been employed in rendering assistance to the ships "Ocean" and "Sardinian," destroyed by fire in the port of Rangoon, and in occasionally towing ships to sea.

MASTER ATTENDANT'S DEPARTMENT, RANGOON.

The office of Master Attendant, filled by Captain H. Lewis, was, under the orders of the Government of India, abolished from the 31st December last, and the duties appertaining to the Department transferred to the Superintendent of the Irrawaddy flotilla.

ARRIVALS AND DEPARTURES AT RANGOON.

The shipping arrivals at Rangoon have been 457 in number, aggregating a tonnage of 1,73,724 tons; and the departures 450 in number, tonnage 1,73,377.

This, in comparison with the previous year, as marginally noted, shows an increase over 1860–61 of 92,010 tons.

The receipts of the Port are as follows:—*Rs.* 61,479. 14., and the charges, *Rs.* 39.032. 7. 6. The number of buoys and moorings are 10 in number. Two first class buoys, with chain &c., have been lost during the year.

1860-61.	Tons.
Arrivals - -	1,31,351
Departures -	1,23,740
Total -	2,55,091

MASTER ATTENDANT'S DEPARTMENT, PORT DALHOUSIE.

The vessels attached to this Department, with their condition and the manner in which they have been employed, are as follows:—

Buoy vessel, "Kate."—Copper much worn, and employed in lifting and replacing buoys in the Bassein river.

Buoy vessel, "Punt."—In good order; attached to the "Kate" for general purposes.

Cargo boat, "Wasp."—In good order; employed in survey duty.

Port gig and cutter.—The gig requires repairs; employed as necessary in port.

ARRIVALS AND DEPARTURES AT PORT DALHOUSIE.

The number of arrivals at Bassein have been 83, tonnage 29,606, and departures 83, tonnage 29,571.

The receipts are as follows:—*Rs.* 7,642. 12., and the disbursements, *Rs.* 10,803. 2.

There are 10 buoys at this port.

TENASSERIM AND MARTABAN PROVINCES, MOULMEIN.

No change of importance has taken place in this Department since last reported on.

The vessels attached to the Master Attendant's Department and Pilot Establishment are as follows:—

"Retriever," buoy vessel.
Jolly boat, buoy vessel.
"Amherstia," schooner.
Jolly boat.
"Amherst," row boat.
"Amherst," canoe.
"Pegue," schooner.
"Pegue," jolly boat.
Master Attendant's cutter.
Two coal boats.
Two canoes.

These vessels are reported by the local authorities to be in good condition.

BUOYS AND MOORINGS.

There are 25 buoys of the 1st, 2d and 3d classes, and balloon class with moorings, belonging to this port, all of which are reported to be in good order.

ARRIVALS AND DEPARTURES.

The arrivals and departures of vessels at Moulmein during the past year, together with their tonnage, is shown in the margin.

Arrivals	510.	Tonnage	1,80,947
Departures	503.	"	1,75,211
Aggregate	1,013.	"	3,56,158

The number of vessels conducted to sea by pilots has been 391, and the number of inward bound vessels, for which pilots were secured, 404, of an aggregate tonnage of 3,25,669.

The receipts of the port have been 36,541 rupees, and the charges, 19,052 rupees.

The steamer "Nemesis" has been attached to this province throughout the year. A statement of her service during that period will be found in a former part of this Report.

PROVINCE OF ARRACAN.

The lighthouses of this province have been maintained in good order throughout the year, and the necessary attention has been paid to the condition of the buoys and moorings.

List of the boats composing the Arracan flotilla:—

"Swift," schooner.
"Dolphin," heave-up boat.
Row boat, No. 10.
Ditto No. 11.
Row boat, No. 12.
Port cutter.
Coal boat.
"Alguada," schooner.

The gun boat "Tickler," having been condemned, was sold by auction on the 1st May 1861. The coal barge has also been condemned, and ordered to be broken up. A new one to replace her is being built at Chittagong.

The schooner "Alguada" arrived at Akyab on the 30th April last, to replace the schooner "Petrel," condemned at Calcutta, on the 10th January 1861.

The amount of port dues collected during the year is as follows:—

	Rs.	*a.*	*p.*
Amount of port dues - - - - - -	24,631	6	–
Sale of charts - - - - - - -	103	4	–
Hire of boat "Dolphin" - - - - -	138	9	–
Ditto of row boat, No. 12, on public service	80	–	–

Chap. V. Marine.

In reviewing the general working of the Marine Department for the past year, the changes, consequent on the reorganization of the service under the Civil Finance Commission Report, may be said to have worked satisfactorily; and, whilst promotive of a wise economy, to have placed the various branches of the Department upon a more efficient basis. The title of "Superintendent of Marine" has been changed to that of "Controller of Marine Affairs and Ex-officio Secretary to the Government of India;" all questions in connexion with marine and naval matters, and requiring the decision of the Government of India, are now consequently disposed of in the Department by the Head of the Marine in his secretarial capacity, an arrangement which has tended greatly to facilitate the despatch of important business. A measure attended with equally advantageous results has been the appointment of a Superintendent of the Kidderpore Dockyard, an officer that was felt to be much needed for guarding the interests of Government in respect to the safe keeping and economical disposal of the vast amount of valuable stores at the command of the dockyard, and for securing a proper supervision over the establishments and widely extended departments of the yard. With the exception of the office of the Naval Storekeeper, the efficiency of the subordinate offices of the yard has not been affected by the change. The Naval Store Accounts, owing to the heavy and constant demands on the establishment, are in a state of arrear, and owing to this circumstance no opinion can be expressed as to the working of that Department under the new arrangement. The withdrawal of the Marine Audit, and its distribution among the several Military Account Offices, may also be considered as advantageous; but the centralization of the accounts in one office is much to be desired. Up to the present time, however, a great deal of extra labour and trouble has been thrown upon the Controller's Office, owing to accounts being constantly submitted to the Marine Office as heretofore; references made from the Military Auditors respecting rules of certain departments of the service, names of stores, authority for certain payments and allowances: all of which, with the limited establishment at the disposal of the Controller, have tended to impede the business of his office; but these drawbacks may fairly be expected in a short time to disappear.

The only part of the new scheme which has not appeared to work well in practice, is the arrangement for receiving all supplies and marine stores from the Commissariat Department. The demands of the service are frequently so urgent for vessels ordered suddenly away, that the time required for going through the routine prescribed for the procuration of such stores is attended with inconvenience to the public service; a good feeling, however, exists between both departments in furthering the interests of Government in this respect, and it is thought that the system may be modified so as to obviate the delay and inconvenience at present experienced.

In reviewing the general working of the departmental branches of the dockyard, it is desirable to state that, notwithstanding the great reductions effected therein, owing to the reorganization of the marine, as above noticed, the highest degree of efficiency has been maintained. The cost of establishments and the other charges incidental to their maintenance contrast favourably with the reports of these departments in former years, and show that the recent changes, combined with the zeal and efficient superintendence of the practical heads of branches, have been attended by results highly beneficial to the State. In the Chief Superintending Engineer's Department, which may be considered the more important branch of this arm of the service, this progress is peculiarly marked. The monthly out-turn of work during the year has averaged 16,607 rupees, whilst the cost of the fixed establishment has been 1,968 rupees, being equal to 12 per cent. only on the former. The reductions that have been effected may be stated as follows:—The cost of fixed establishment, including apprentices in April 1861, stood at 3,320 rupees, whereas the charges under this head, including apprentices for the month of April 1862, amounted to 2,094 rupees, showing a reduction in the establishment of about 34 per cent. The cost of artificers' labour, from June 1861 to April 1862, shows a monthly average of 2,280 rupees, being a saving of 20 per cent. on the estimated Budget requirements of the previous year.

Altogether, considering that the sweeping changes recently introduced are only in the first year of their novitiate, Government have every reason to be satisfied with the working of the whole Marine Department.

No financial statements are given in this Report, as the whole of the Account and Audit Branch of the Marine Department has been transferred to the different offices of Account under the control of the Military Finance Department.

(signed) *J. G. Reddie,*
Officiating Controller of Marine Affairs.

Fort William,
27 October 1862.

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APPENDIX to the ANNUAL REPORT of the Branch of the MARINE DEPARTMENT under control of the GOVERNMENT of INDIA, for 1861-62.

STATEMENT of VESSELS belonging to the MARINE DEPARTMENT under the Orders of the Government of INDIA on the 30th April 1862, showing their Names, Date when Built or Purchased, Cost and Condition.

NAMES OF VESSELS.	When Built.	Whether Built by Government or Purchased, and if Purchased, in what Year.	Cost when Built or Purchased. Rs.	a.	p.	Present Condition.	REMARKS.
Sea-going Vessels.							
Arracan, steamer	In 1859	Built by Government	4,85,204	–	–	Was docked in June 1861, and had her copper patched; her hull and spars appear sound.	
Sydney "	" 1852	Purchased in 1857	2,55,000	–	–	Had her bottom examined and repaired, upper and forecastle decks and bulwark entirely renewed, lower decks and cabins partly renewed and refitted, several of her spars renewed, and is now in good order.	
Australian "	"	ditto	2,50,000	–	–	This vessel is undergoing a thorough repair, her upper decks, forecastle, and bulwarks being entirely renewed; lower deck and cabins to be refitted and partly renewed; masts and spars all to be renewed.	
Nemesis " (stationed at Moulmein)	" 1856	Built by Government	1,66,608	–	–		
Proserpine "	" 1857	ditto	1,23,871	–	–	This vessel when docked had her bottom examined and painted, and several defective iron plates renewed; her wood-work and spars are in good order.	
Sesostris "	-	-	1,60,309	–	–	This vessel, as far as can be ascertained afloat, shows no signs of straining her spars; her boats are in good order.	
Tubal Cain "	At Liverpool in 1851	Purchased in 1854	1,67,536	–	–	This vessel, as far as can be ascertained afloat, shows no signs of decay about the waterway and covering board; she is, however, found to be infested with white ants round the stem and knight heads, and in several places in the top gallant forecastle; her spars and boats are in fair order. This vessel will shortly require a thorough repair.	
Pluto " (stationed at Arracan)	Rebuilt in 1851	-	4,03,145	–	–		
		Carried forward - - Rs.	20,11,673	–	–		

STATEMENT of Vessels belonging to the Marine Department under the Orders of the Government of India on the 30th April 1862, &c.—*continued.*

NAMES OF VESSELS.	When Built.	Whether Built by Government or Purchased, and if Purchased, in what Year.	Cost when Built or Purchased. Rs.	a.	p.	Present Condition.	REMARKS.
		Brought forward -	20,11,673	–	–		
Inland Vessels.							
Jumpah - - steamer - -	In 1835 -	- - - -	80,000	–	–	The iron plating and wood-work entirely gone; to repair her would be tantamount to a rebuild.	
Koladyne - - „ - -	„ 1841 -	- - - -	1,23,863	–	–	Hull and wood-work are in good condition.	
Sir William Peel „ - -	„ „ -	- - - -	1,28,196	–	–	„ „ „ „	
Teesta - - „ - -	„ „ -	- - - -	97,129	–	–	This vessel when docked had her bottom cleaned and painted, and wood-works repaired. She is now in good order.	
Adjai - - „ - -	„ „ -	- - - -	1,11,117	–	–	Hull and wood-work are in good order.	
Ganges - - „ - -	„ 1860 -	- - - -	2,06,166	–	–	„ „ „ „	
Mechanic - - „ - -	„ 1859 -	- - - -	94,267	–	–	Unfit for general service; will answer for a hulk; she will shortly require to be docked.	
Sir Henry Lawrence „ - -	„ „ -	- - - -	1,89,636	–	–	„ „ „ „	
Tay, steel, No. 1 „ - -	„ 1861 -	- - - -	1,80,672	–	–	Hull and wood-work appear sound.	
Spey „ „ 2 „ - -	- - -	- - - -	1,79,856	–	–		
Jaboonah - - „ - -	„ 1860 -	- - - -	2,06,317	–	–	Wood-work and hull in good order.	
Koel - - - „ - -	„ 1857 -	- - - -	1,27,511	–	–	This vessel is at present in dock being lengthened.	
Gunboat, No. 4 - „ - -	„ „ -	- - - -	36,728	–	–		
Rajshaye, steam ferry - - -	- - -	- - - -	25,000	–	–		
Benares „ - - -	- - -	- - - -	30,537	–	–		
Myou „ - - -	- - -	- - - -	29,227	–	–	Her hull and wood-work appear sound.	
Teknaaf „ - - -	- - -	- - - -	31,405	–	–	„ „ „ „	
Patua „ - - -	- - -	- - - -	30,537	–	–	„ „ „ „	
Setang „ (at Alguada Reef Lighthouse) - - -	- - -	- - - -	1,05,000	–	–		
Accommodation Boat.							
Mattabhangah - - - -	In 1836 -	- - - -	40,000	–	–	Wood-work in good condition; iron plating thin.	
Cargo Boats.							
Gunduck - - - - -	„ 1840 -	- - - -	39,918	–	–	Wood-work and hull in good condition.	
Goomtee - - - - -	„ 1842 -	- - - -	30,000	–	–	Wood-work in a decayed condition; iron plating thin.	
Barge, No. 1 - - - -	„ 1860 -	- - - -	11,960	–	–	Wood-work and hull in good condition.	
„ „ 2 - - - -	„ „ -	- - - -	11,960	–	–	„ „ „	
„ „ 3 - - - -	„ „ -	- - - -	11,960	–	–	„ „ „	
„ „ 4 - - - -	„ „ -	- - - -	11,960	–	–	„ „ „	

Troop Boats.						
Dallah	In 1856	-	45,649	8	1	Wood-work and hull in good condition.
Konaie	„ 1860	-	56,216	–	–	„ „ „ „
Gogra	„ 1859	-	64,098	–	–	„ „ „ „
Isla, steel, No. 1	„ 1860	-	46,467	–	–	Hull built of very slight material; hauled up on the slip, being strengthened.
Tummel, „ 2	„ 1861	-	46,467	–	–	„ „ „ „ „
State Yacht Establishment.						
Iron State Yacht Sonamookey	In 1852	-	46,650	–	–	Wood-work and hull in good condition.
Music boat (old) sold; another nearly ready.						
Baggage boat, No. 1	„ 1840	-	2,000	–	–	
„ „ „ 2	„ „	-	2,435	–	–	
Bholeo, No. 1	„ 1847	-	2,127	–	–	
„ „ 2	„ 1838	-	2,800	–	–	
„ „ 3	„ 1834	-	1,600	–	–	
„ „ 4	„ 1838	-	2,391	–	–	
Boats under the Naval Storekeeper.						
Cargo boat, No. 1	In 1858	-	280	–	–	
„ „ „ 2	„ 1859	-	488	–	–	
Coal „ No. 1	„ 1855	-	3,158	–	–	
„ „ „ 2	„ 1855	-	2,691	–	–	
„ „ „ 3	„ 1856	-	6,500	–	–	
„ „ „ 4	„ 1858	-	2,693	–	–	
VESSELS AT THE OUT-STATIONS.						
Port Blair Settlement.						
Gun boat, No. 5	-	-	33,109	–	–	
„ „ „ 17 (wooden)	-	-	3,009	–	–	
„ „ „ 18 (ditto)	-	-	3,009	–	–	
Vessels and Boats at Mulmein.						
Retriever, buoy vessel	In 1858	-	33,948	–	–	Good; requires caulking.
Amherstia, schooner, rigged, decked	„ 1852	-	6,133	–	–	Generally good; white ants in several places.
Amherst, row boat, decked, lug rigged	„ 1851	-	1,500	–	–	Generally good; requires overhauling.
Amherst, canoe, open	-	Purchased in 1857	100	–	–	Good.
	Carried forward	Rs.	45,98,113	8	1	

STATEMENT of Vessels belonging to the Marine Department under the Orders of the Government of India on the 30th April 1862, &c.—*continued.*

NAMES OF VESSELS.	When Built.	Whether Built by Government or Purchased, and if Purchased, in what Year.	Cost when Built or Purchased.			Present Condition.	REMARKS.
			Rs.	*a.*	*p.*		
		Brought forward	45,98,113	8	1		
Master Attendant's cutter, open	In 1850		448	—	—	Good.	
Two coal boats, open	„ 1852		1,230	—	—	„	
Amherst, jolly boat, open	„ 1854		300	—	—	„ requires repairs.	
Pegu, schooner, rigged, decked	„ 1841		3,750	—	—	Generally good; requires caulking.	
Vessels and Boats at Pegu.							
Lord William Bentinck, steamer	In 1845	Built by Government	77,788	—	—	Hull will require repairs shortly; boilers old, and will require renewing in the course of the year	Employed in towing troop boats to and from the frontier, and occasionally towing ships to sea, in conveying mails, inspection of the beacons, &c.
Damoodah „	„ 1843	ditto	90,000	—	—	Hull and machinery, &c., in serviceable order	Employed in towing troop boats to and from the frontier, and conveying mails on special duty with the Commissioner of the Pegu Division to Bassein, and in effecting the relief of the garrison at Bassein.
Mahanuddy „	„ 1843	ditto	90,000	—	—	„ „ „ „	Employed in towing the "Spey" to the relief of the light vessel "Gallant," and in rendering assistance to the vessels destroyed by fire. Has been in reserve for 10 months, and was brought into service on the absence of the "Damoodah" at Bassein.
Nerbudda „	„ 1845	ditto	77,988	—	—	In working order; hull will require attending to shortly	Laid up in ordinary.
Diana „	„ 1854	ditto	68,956	—	—	Machinery and boilers require overhauling; the latter much worn	ditto.
Actæon, cargo boat		ditto	15,573	—	—	Hull requires repairs	ditto.
Sutledge, troop boat	In 1842	ditto	40,000	—	—	Hull in good condition	Employed in conveying troops and Government stores to and from the frontier, and in embarking troops and baggage for conveyance to transports.
Panlang „	„ 1853	ditto	43,182	—	—	„ „	Employed in conveying troops and Government stores to and from the frontier, and in the relief of the garrison at Bassein.

Kelpie, gun boat	-	Bought in 1852 by Commodore Lambert	500	–	–	In good condition	Ready for river service.
Master Attendant's Department.							
Gallant, light vessel	Built in 1848, at Cochin	Purchased in 1858	32,510	–	–	„ „ underwent repairs in March last	At the Light Station.
Port gig and cutter	In 1858–59	Built by Government; value of cutter	1,261	7	7	In good order; the latter requires repairs	Employed as necessary in port.
Master Attendant's Department, Bassein.							
Kate, buoy vessel	-	-	18,116	–	–	Copper much worn	Lifting and replacing buoys in the Bassein river.
Wasp, cargo boat	In 1855–56	Built by Government	11,087	13	3	„ „	Employed on survey duty.
Port gig and cutter	„ 1858–59	ditto - value of cutter	1,013	1	4	„ „ Gig requires repairs	Employed as necessary in port.
Dockyard at Rangoon.							
Chief Superintending Engineer's gig	In 1860–61	Built by Government	551	6	–	Good; copper partly worn out	Employed as necessary.
Government builder's gig	„ „	ditto	403	3	–	Requires repairs	ditto.
Three cutters attached to the yard	„ 1856–57	-	1,408	5	–	1 in good order, 1 serviceable, and 1 requires repairs	ditto.
Superintendent Flotilla's Boileah	„ 1853–54	Built by Government	584	9	–	Requires repairs	ditto.
Coal boat, 20 tons, open	„ 1855–56	ditto	1,900	2	–	Serviceable	ditto.
„ 30 tons „	„ „	ditto	2,300	4	–	„	ditto.
Vessels and Boats at Arracan.							
Swift, schooner	In 1842	-	11,847	–	–	Will shortly require a thorough repair	Employed generally under the orders of the Deputy Commissioner, Ramree.
Dolphin, heave-up boat	-	-	23,053	–	–	Will require new copper after the S. W. Monsoon	Employed on port and buoy duty; the erection of the Staff Beacon on Oyster Island, &c.
Row boat, No. 10	-	-	1,800	–	–	Rotten	Laid up.
„ „ 11	-	-	1,800	–	–	-	Under orders of the Executive Engineer for the purpose of running the deep sea cable.
„ „ 12	-	-	1,800	–	–	-	Port and harbour duties.
Port cutter, Akyab	-	-	833	–	–	-	Postmasters' work, &c.
		TOTAL *Rs.*	52,20,097	11	3		

*** During the year the following vessels have been transferred:—
Steamer "Lady Canning," I. N., to Port Blair, as a Settlement vessel.
Schooner "Alguada," from the Alguada Reef Works to the Province of Arracan.

Fort William, 27 October 1862.

(signed) *J. G. Reddie,*
Offg. Controller, Marine Affairs.

Chap. VI.
Geological
Survey.

CHAPTER VI.

GEOLOGICAL SURVEY.

ANNUAL REPORT of the Superintendent of the GEOLOGICAL SURVEY of INDIA, and of the MUSEUM of GEOLOGY, CALCUTTA, 1861-62.

GEOLOGICAL SURVEY.

THE Geological Survey of India has, during the past year, been working with diminished numbers. I had, in my last annual report, to record the death of one of our staff, Mr. Trench. Subsequently Mr. Willson was compelled to proceed to Europe on medical certificate for 12 months, and has, therefore, been absent during the entire field season; and Mr. H. F. Blanford resigned his appointment in December. Immediate steps were taken to supply Mr. Trench's place, and Mr. C. A. Hackett was appointed Assistant on the Survey in November 1861, and has since been actively engaged in the field. Mr. Blanford's place has not yet been supplied.

Bengal.—The diminution in the number of our staff above alluded to has principally affected our progress in the Bengal division of our work. Subsequently to the close of the field season in the plains in 1861, Mr. William Theobald and Mr. F. Mallet were deputed to visit Chini and the Spiti Valley in Kunawur, with a view, as far as possible, of procuring a good series of the very interesting fossils there occurring, and of tracing out the succession of these beds in that district. These rocks are obviously a contiuuation of those which occur to the north of Kumaon at Niti, and which had been visited by Mr. Mallet in 1860. A very fair series has been procured from the Spiti Valley, representing both the Mesozoic and Palæozoic groups; and when the fossils come to be examined in detail, I anticipate that they will throw much light on the apparent anomalies in the distribution of these organic remains.

Mr. Henry B. Medlicott has steadily continued during the past season his examination of the outer ranges of the Himalaya, and has carried up his work to the borders of the Jummoo Country and the Maharajah of Cashmir's Territory. This gives a range from the River Ganges at Hurdwar up to the Ravee of about 200 miles. Of the country to the east of the Ganges at Hurdwar there are as yet no trustworthy maps to work with.

I have already elsewhere strongly urged the publication of the valuable and beautiful maps which have been constructed of the Jhelum and Rawul Pindee Districts, convinced that the careful examination of the Salt Range will prove the key to much of the geology of the north-west; and I still confidently hope that these may soon be available.

The examination of the country adjoining the Rewah Territory and (in part) of Rewah itself has been continued, and a large area completed. A careful survey of the Rewah Territory having been ordered by Government to commence from next cold season, no more detailed investigations have been carried out in that country than were essential to connect our sections in the Jubbulpore and South Rewah Country with those more to the north in Mirzapore, &c., all closer detail being reserved for future examination, when a map sufficiently accurate for record of our work may be available.

Our knowledge of the alluvial deposits has been carried on along the southern portions of Behar and Shahabad through Mirzapore, and as far west as Tirhowan or Kirwee, and the country south of the Ganges and Jumna to this parallel, as well as that north of the Ganges below Allahabad, completing, so far as the alluvial deposits are concerned, sheets 102, 103, and the southern portion of sheet 88 of the Indian Atlas.

The maps of the districts in Hazareebaugh adjoining the southern portion of Monghyr' alluded to in my last Report as then in preparation, were not ready until the season for field work had so far advanced that it was not found possible to take them up with advantage.

Madras.—As announced in the annual report for the preceding year, the Madras party of the Geological Survey of India has been engaged in carrying on the examination of the districts of Cuddapah and Nellore, as represented on sheet No. 77 of the Indian Atlas, and in completing that portion of Salem and North Arcot, included in sheet 79, which remained unfinished at the commencement of the season.

This latter sheet has now been completed, and including both the highly interesting fossiliferous districts of the cretaceous rocks of Trichinopoly, &c., and a large portion of the very valuable iron deposits of Salem and adjoining districts, cannot fail to be of much practical utility. The working out of these iron beds in detail proved rather more tedious than had been anticipated, as well from the closeness of examination required as from the difficult nature of the ground where they occur. The extension and continuation of these beds into the Javadie Hills to the north remains to be traced out. This work has been entirely in Mr. Foote's hands.

Mr. C. Oldham and Mr. King have been actively engaged in Cuddapah District, and have been able to make good progress. The country is in many places very inaccessible and without roads, the map in parts exceedingly deficient in detail and accuracy. During 1861 about 2,500 square miles had been examined, including all the country in the north-west of Cuddapah and the Ellaconda Mountains (the hills separating Cuddapah and Nellore Districts); and since the resumption of work this year the examination of the adjoining country, to the extent of about 1,000 square miles, in Nellore, extending along the eastern side of the Ghats, and of about 1,200 square miles in Cuddapah, has been completed, making in all more than 4,500 square miles examined up to date, an area which, considering the nature of the country traversed and the detail of the structure, I consider highly creditable to those engaged.

I am further happy to be able to state that no serious illness has impeded our progress here.

Lectures in Madras.—In connexion with the Madras party, I have to report that during the rainy season there one of the assistants of the Geological Survey, Mr. Bruce Foote, delivered in Madras, at the College of Civil Engineering, a course of lectures on geology, which proved highly successful. Of the engineering students who were obliged to attend (but who formed only a small portion of the audience), 48 came up for examination afterwards, and 20 passed, many of them with very marked success, 137 marks out of the total of 150 having been attained.

This progress was considered highly satisfactory; and, at the request of the Madras Government, on the recommendation of the Principal of the College of Civil Engineering and of the Director of Public Instruction, arrangements have been made for the delivery of another course during the present year. These lectures, being delivered during the season when field-work is impracticable, do not interfere with the general progress of the survey, while they proved not only valuable to the students, but very interesting to the public, who attended in considerable numbers.

I look forward anxiously to the establishment of lectures in a somewhat similar way in Calcutta, where at the present there are no means available for acquiring a knowledge of geology or its applications. The means of accomplishing this without additional cost I have already fully pointed out.

During the same season in Madras the assistants of the Geological Survey have, with my full sanction, aided largely in the arrangement and classification of the mineralogical and palæontological collections of the Madras Central Museum, for which aid Lieutenant Mitchell, the officer in charge, has expressed himself much indebted. I think it in all cases highly desirable that the officers of the Geological Survey of India should (wherever such is practicable without serious interference with their more immediate duties) endeavour in every way to spread a knowledge of geology and its allied pursuits; and I have, therefore, always been glad to give such help as is here noticed, whenever it was possible to do so.

Pegu.—During the past year the labours of the survey party in Pegu have been directed to the examination of the country adjoining the previous year's work in Henzada District; and that portion of Bassein District which lies between the Ngawoon or Bassein River and the range of the Arracan Hills has been explored, together with a considerable tract lying to the east of the river in the neighbourhood of the towns of Bassein, Ngapootan, and Myoung Mya. Opportunity was also taken to visit the Alguada Reef and Diamond Island.

Contrary to expectation, it has been found that considerable tracts of rock, and of subrecent formations, distinct from the true delta alluvium, occur within the delta of the Irrawaddy River. How much of this immense area may be occupied by such rocky masses is as yet unknown, and they may extend over the whole of the wide space intersected by the channels of the Irrawaddy and Sitang. In any case, it will be essential to devote much more time to the investigation of this area than was estimated under the supposition that, being all of the ordinary delta alluvium, a cursory examination would suffice.

Publications.—The valuable Report on the Raneegunge Coal Field by Mr. William Blanford, which I announced as nearly ready in last Report, was issued in August. This contained a detailed map, on the scale of one inch to the mile, of that very important field, and general statistics of the outturn of coal for all India for the years 1858, 1859, and 1860.

During the year also, in accordance with arrangements noticed in last Report, the first series of plates and descriptions of the magnificent series of fossils obtained during the progress of the Geological Survey has been issued; containing, in 25 quarto plates and accompanying letterpress, figures and descriptions of all the nautiloid cephalopoda from the cretaceous rocks of South India; and subsequently the first fasciculus of the second series of these fossils has appeared. This second series will embrace the most remarkable and interesting group of fossil plants from the Rajmahal Hills, and will be continued regularly every three months until completed.

The detailed report on the cretaceous rocks of South India, drawn up by Mr. Henry Blanford, is just ready, and will be issued before the close of the present month. It has been unavoidably delayed a little by Mr. Blanford's departure.

As usual, a map is annexed to this report, on which is shown the present state of our progress both in field-work and publication.

It will be essential that some systematic mode of publication of the Indian Atlas sheets, with the Geological lines on them, should soon be adopted, as already there are several of these ready for issue.

During the year a series of our Geological Maps, sufficient to show the amount of detail with which the survey is carried on, and the area already examined, were prepared and forwarded to the Great Exhibition in London. With these a good series of large-sized specimens (cubes of one foot and more) of all the principal coals worked in Bengal were also forwarded, which will give a fair representation of Indian coals. A full series of the cretaceous fossils described in the " Palæontologia Indica " were also forwarded.

The sum of *Rs.* 180. 5. has been paid to the credit of Government, net proceeds of the sale of copies of Memoirs, &c. during the year.

Library.— During the year, above 500 volumes or parts of separate works have been added to the Library, of which, as before, a very large proportion has been presented by the various scientific institutions and societies with which we correspond and exchange publications, to the number of which some additions have been made during the past year.

Our Library has, as usual, been frequently referred to during the past year.

Museum.—The additions to our collections, derived from the Geological Survey of India during the past year, have not been so numerous as on some previous occasions, simply from the fact, that the survey has not been working in fossiliferous districts. We have, nevertheless, obtained many very valuable additions. From the Spiti Valley and adjoining districts we obtained, by the exertions of Mr. W. Theobald and Mr. Mallet, a very interesting series of fossils from both the secondary and older rocks of that neighbourhood; also some tertiary fossils from the neighbourhood of Dugshai and Subathoo. Mr. W. Blanford procured some good specimens of mastodon, elephas, deer, &c., and some very remarkable novelties from the Irrawaddy Valley.

To Dr. A. Fleming, we are indebted for a series of Palæozoic Brachiopoda from the Salt Range, valuable as having been identified and named by Mr. Davidson, who has recently described these fossils. Mr. W. S. Atkinson has presented a small series of fossils from near Cherra Poonjee.

Our Petrological collections have been enriched by many good specimens; among others a good, although not very numerous, series from the extinct volcano, Puppa Mountain, in Burmah, collected by Mr. Blanford during a recent visit.

We still labour under the same difficulties of badly lighted and inconvenient rooms for exhibiting and making fully useful such collections.

The number of visitors during the last year has been about the same as in the preceding.

Our small laboratory has proved of much use, both specially to the researches of the survey, and also to the various departments and to the public. During the year, in addition to all his duties as Curator of the Museum, Mr. A. Tween has carried out assays or analyses of coals (33), soils (7), iron-ores (18), limestone (9), water (7), &c., &c., and the results thus obtained have, in many cases, proved valuable.

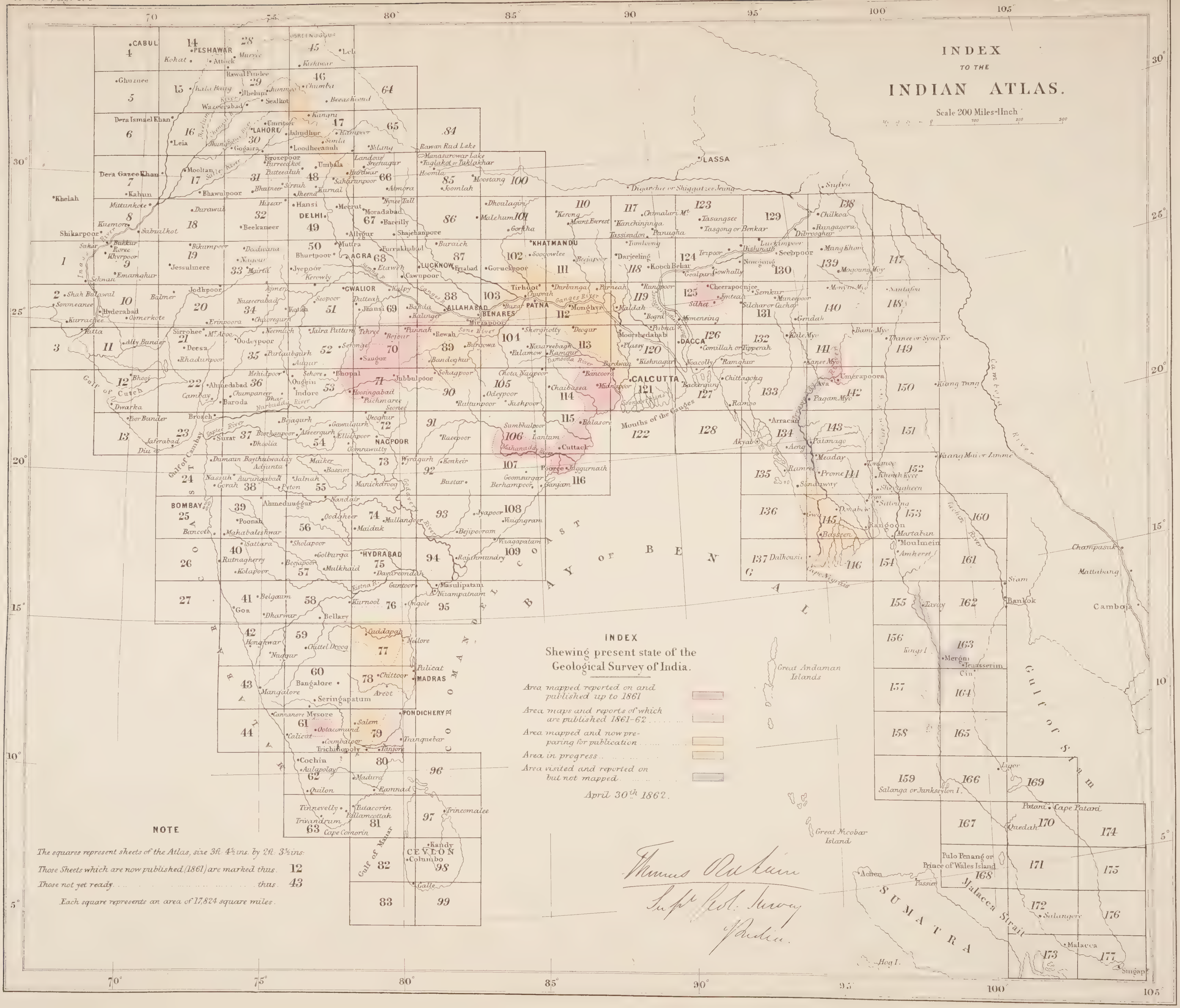
Collections of duplicate specimens of fossils, &c., have been forwarded during the past year to the Madras Museum, and a series is now ready and waits an opportunity for despatch to the Kurrachee Museum. In such cases, our wish has always been to render the collection so forwarded as complete as possible in specimens illustrative of the local peculiarities of the districts to which they are sent. In this way, for example, we have packed for Kurrachee a series of Nummulitic fossils, amounting nearly to 100 distinct species and about 180 specimens.

A list of those Institutions from which we have, during the year, received publications, many of them very valuable, in exchange for our Memoirs, is appended.

(signed) *T. Oldham,*
23 May 1862. Superintendent of Geological Survey of India.

GEOLOGICAL SURVEY OF INDIA.

PAPER.—EAST INDIA (PROGRESS AND CONDITION.)



INDEX
TO THE
INDIAN ATLAS.

Scale 200 Miles=1Inch

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Shewing present state of the Geological Survey of India.

Area mapped reported on and published up to 1861	▭
Area maps and reports of which are published 1861-62	▭
Area mapped and now preparing for publication	▭
Area in progress	▭
Area visited and reported on but not mapped	▭

April 30th 1862.

NOTE

The squares represent sheets of the Atlas, size 3ft: 4½ins. by 2ft: 3½ins:

Those Sheets which are now published (1861) are marked thus. **12**

Those not yet ready .... thus. 43

Each square represents an area of 17,824 square miles.

Thomas Oldham
Supt. Geol. Survey
of India.

No. 271.—Ordered, by the House of Commons, to be printed, 15 May. 1863
Henry Hansard, Printer.

Chap. VI.
Geological Survey.

List of Societies and other Public Institutions, &c., from which Publications have been received for the Library of the Geological Survey of India during the Year 1861-62.

Government of India.
Government of Bombay.
Government of Madras.
Government of Bengal.
Royal Society, London.
Royal Geographical Society, London.
Geological Society, London.
Royal Institution, London.
British Museum, London.
Geological Survey of Great Britain and Ireland.
Commission des Annales des Mines, Paris.
Royale Academie de Belgique.
Royale Academie de Munich.
Royale Academie de Stockholm.
Imperiale Societe des Naturalistes du Moscow.
Imperiale Academie des Sciences, Vienna.
Academie des Sciences, Dijon.
Linn. Societe du Normandie, Caen.
University of Norway.
Smithsonian Institute, Washington.
Academy of Natural Sciences, Philadelphia.
Franklin Institute, Pennsylvania.
Canadian Institute.
Asiatic Society, Bengal.
Asiatic Society, Bombay.
Literary Society, Madras.

CHAP. VII.
Port Blair.

CHAPTER VII.

REPORT on the ADMINISTRATION OF PORT BLAIR, by the SUPERINTENDENT. For 1861-62.

THE year 1861 has not been marked by the material progress of this Settlement to the extent anticipated at the close of last year. The considerable diminution in numbers from 2,202 to 1,836, of whom 145 are females, together with the stern retrenchment of expenditure necessitated by the financial views since adopted in India, will account for this; but as regards the former, the loss was not only numerical, but that of a body of men, generally the most healthy, robust, and intelligent, who had been trained to a great variety of trades and services during a period of nearly three years; still there has been progress, and on the whole, it is hoped, a permanent gain.

2. The convict population have behaved quietly. One serious offence alone was committed during the year, the murder of one convict by another; this case has been the subject of a special report, so no more need be said of it here. From the Appendices (1 and 2) it will be observed that the remaining offences were mostly of a trivial nature. Enhancement of sentence has been deemed the most fitting punishment for term convicts convicted of a repetition of their original crime. Only one freeman was convicted of a heinous offence during the year.

3. The number of escaped prisoners during the year* is less than that of last year; the numbers who escaped and did not return in 1858 was 178; in 1859, 158; in 1860, 43; the number this year is only 21. The class of men who take to the jungles continues to be the same, *viz.*, those who in India subsist by plunder rather than labour—the Bengal dacoit, the Bheel or Mahratta dacoit, and the Puthan adventurer of the Deccan. The diminution in the number of escapes this year, notwithstanding that the number of new-comers is greater, would seem to show that experience is beginning to tell. The instances in which any remain at large and alive are probably very very few. Two females deserted with their husbands: in one case both were probably killed, and in the other both returned.

4. Eighty-nine male life-convicts married 89 female life-convicts during the year,† making a total of 97; but of these, 11 were separated by death. Of the entire number, 12 males support themselves and their wives; 31, though labouring for Government, support their wives; 43, together with their wives, labour for the Government. The cases of complaint against the females have been surprisingly few.

5. The number of convicts self-supporting is 297, against 284 last year.‡ It has been found necessary to restrict the number, in order to admit of a sufficiency for the daily service of Government.

6. The forces of all sorts for the maintenance of tranquillity and order have been greatly reduced during the year, without any ill effect. The naval brigade has been decreased from 150 to 110 rank and file. The Sebundy corps has been entirely dispensed with, as also the vessel of war of the Bombay Navy hitherto stationed here. In lieu of the Sebundies, 50 of the best-behaved short-term convicts have been armed, chiefly for the protection of parties working in the jungle; and in lieu of the man-of-war, the steamer "Lady Canning," with a small native crew, has been stationed here.

7. Clearing has not been much extended during the year, for as much land was already cleared as could be cultivated with profit. The manufacture of salt and sugar for local consumption, has been permanently introduced. The salt manufacture was intermitted for nine months, in order to allow of the consumption of stock in hand, but is now permanently carried on, and the Settlement depends entirely on its own resources for the supply of this article. The manufacture of sugar has been hitherto tentative, but success as to quality having been at last attained, the production will be greatly extended. The Appendix (6) shows that the entire value of settlement produce§ other than cattle sold during the year, was *Rs.* 3,765. 13. 10. against *Rs.* 1,893. 2. 10. last year. For neither year is the value of articles consumed for Government purposes (amounting this year to *Rs.* 460. 13. 3.), nor the stock remaining in store at the end of the year included. In addition to the above, 12 tons of bullet-wood, valued at 600 rupees, have been supplied to the arsenal at Fort William; 500 tons of coral have been shipped to Calcutta, either for the use of the Department Public Works, or to be sold by auction. The value of the whole, at the rate at which part was sold by auction, would be 8,000 rupees. An agreement was entered into with certain Burmese, conceding to them the right to collect cocoanuts on the Cocos Island for one year, in consideration of their giving one-fourth of their collections. The monopoly of the edible bird-nests on the Andaman Islands has also been granted to a Chinese for a period of two years, for the sum of 3,200 rupees annually.

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* Appendix 3.

† Appendix 4.

‡ Appendix 5.

§ Exclusive of that sold by self-supporting convicts.

8. On Ross Island a godown two storeys high, 150 feet long by 40 broad, with a concrete floor to the lower storey, has been completed, as also an officer's bungalow raised on posts 10 feet off the ground. An apothecary's house, in progress last year at Atalanta Point, has been finished. On Chatham Island, a spacious workshop, giving cover to the sawmill, has been erected; and at Viper Island, the apothecary's house, commenced at the close of last year, has been completed. Numerous temporary buildings have been erected or repaired, and a large supply of tiles for future use has been made.

9. The boats of the Settlement have been kept in good order. The gunboat "Perseverance," just rebuilt at the close of last year, has fully answered all the expectations formed of her. She steams as well as ever, and has proved eminently useful for towing boats, and even ships, and visiting the coast. The services of the store-vessel "Walter Morrice" has been dispensed with in favour of a commissariat establishment on shore. This arrangement will, it is hoped, tend to the better preservation of provisions, which suffered much in the vessel's hold, and prove in other respects more economical.

10. Appendix (7) shows the number of vessels which entered or left Port Blair during the year; most of these came on the service of the Settlement, and had to be unloaded, ballasted, or coaled.

11. The health of the Settlement may be considered comparatively good. The Appendix (8) shows that among the convicts the mortality is 15 per cent., an increase of one per cent. on the rate of last year. The statement, as it regards admissions into hospital, cannot be compared with last year; for during the year under report, the practice has been introduced of treating convalescents and persons suffering from trivial ailments as out-patients, and it is to be regretted that no record of these was kept. The rate of mortality is high, but still lower than that of 14 jails in Bengal* in 1858, the latest year for which the means of comparison are here available. It would appear probable from the Appendix (9), that a good deal of mortality must be attributed to other causes than the effects of climate; the mental depression consequent on a sentence of transportation, coupled with the long journey by land and sea, in many cases render the convict a victim to apparently trivial complaints. The Europeans in the Settlement have, for the most part, enjoyed excellent health. There has been no death among them during the year.

* *See* Ewart's Sanitary Condition of Indian Gaols, p. 21.

12. Copper 1-rupee tokens struck in the Calcutta Mint have been introduced during the year, for the payment of the convict subsistence allowance. The advantages of this measure are, that it checks illicit traffic with ships, and does away with the labour of counting a large quantity of copper coin (half-pice and pies) twice every month.

13. The period of service of the naval brigade having expired, the men were discharged, and fresh hands enlisted on reduced allowances. The conduct of the brigade has been excellent, and very great credit is due on this account to Lieutenant Hellard and his officers, and also for their zealous co-operation with the superintendent in all duties connected with the Settlement.

14. The Bishop of Calcutta having arranged that the chaplain of Moulmein should attend to the spiritual wants of Port Blair, one visit was made during the year. Two baptisms and two marriages (one by registrar) celebrated during the year. The stay of the chaplain did not admit of his having Divine service. It is to be hoped that some more satisfactory arrangement may be made for the performance of Divine worship and ordinances of the Church.

15. Intercourse with the aborigines has continued to be of rare occurrence; whenever in the least encouraged they have invariably commenced plundering. In January, six aborigines from different parties were captured in acts of aggression on the Settlement. One of these escaped; of the remaining five two were released, and three were sent to Moulmein in the hope that they might acquire a little English, and, by gaining some familiarity with the habits of civilised men, might prove the means of opening communication with their brethren. During a stay of eight months they acquired nothing. One died of consumption, and the other two were probably only sent back in time to save them from the same fate. They have not returned since their release, though treated with great kindness and loaded with what, to them, must have been great wealth when dismissed. The only result of their capture was the acquisition of about 100 words or phrases of their language by Major Tickell. The whole of the words hitherto acquired have been collected, and the vocabulary has been submitted to the Governor General in Council.

16. The aborigines did not, during the year, attempt any combined or open attack on the Settlement; though it is believed that a large party, who once made their appearance at Atalanta Point, came for purposes of plunder, and were only deterred by the preparations for resistance which they saw. On the last day of 1860 a convict boatman was wounded by one of the aborigines without any provocation; he died from the effects of the wound. On the 8th of October an aborigine, who formed one of a plundering party, is said to have been shot. These are the only casualties within the Settlement, arising from collisions, during the year. But runaway convicts or others met by the natives in the jungle, have always been plundered of any iron in their possession, often wounded, and no doubt in many cases killed.

APPENDICES.

Appendix No. 1.

Statement showing Punishments inflicted by the Superintendent of Port Blair during the Year 1861.

CRIME.	3 Years.	2 Years.	1 Year.	6 Months.	Less than 6 Months.	Fined.	Flogged.*	Otherwise Punished.	REMARKS.
Theft	2	–	1	1	2	1	25	10	* Largest number of stripes inflicted in any one case, 30.
Assault	–	–	–	–	–	2	6	2	
Escape	–	–	–	–	–	1	7	14	
Attempt to escape	–	–	–	–	–	–	1	18	
Forgery	–	–	–	–	–	–	–	–	
Gambling	–	–	–	–	–	1	11	2	
Breach of discipline	–	–	–	–	–	9	9	8	
False complaint	–	–	–	–	–	–	2	–	
Skulking from work	–	–	–	–	–	15	1	19	
Trespass	–	–	–	–	–	1	1	10	
Fraud	–	–	–	–	–	3	6	3	

Appendix No. 2.

List of Persons sentenced to Imprisonment at Port Blair during 1861.

NAME.	CONDITION.	CRIME.	SENTENCE.	REMARKS.
Khoda Buksh	Term Convict, No. 1722	Theft	Three months' imprisonment from expiry of his original sentence.	The prisoner was undergoing five years' imprisonment for armed rebellion. He robbed 68 lbs. of plantain.
Moondey	Ditto, No. 2,772	Having in possession stolen property.	Ditto	The prisoner was undergoing seven years' imprisonment for aiding and abetting those making war against the Government. As above.
Fidee Hossein	Ditto, No. 4,618	Theft	Six months' imprisonment from expiry of his original sentence.	The prisoner was undergoing four years' imprisonment for theft committed at Fyzabad. He robbed 1½ lb. of sugar from Commissariat.
Pho Kah	Ditto, No. 3,862	Ditto	Three years' imprisonment from expiry of his original sentence.	The prisoner was undergoing sentence of three years' imprisonment for burglary committed at Prome. He entered into a convict commissariat baker's house at night, and carried off a box containing 53 rupees.
Ramjan Khan	Ditto, No. 3,573	Having in possession stolen property.	Ditto	The prisoner was undergoing sentence of seven years' imprisonment for theft, and having stolen property knowing to be such; committed at Azimgurh. He stole property, value 45 rupees, belonging to the head-clerk.
Abid Ally	Lascar of H. M. S. "Lady Canning."	Lurking in house and trespass at night.	One year's imprisonment with hard labour in irons.	Prisoner entered the house of Mr. Green, merchant, at night with intent to rob.

Appendix No. 3.

Statement showing the Increase and Decrease of Convicts in the Settlement of Port Blair, from 1st January to 31st of December 1861.

YEAR.	Remaining from Year previous.	Received.	Total.	Died in Hospital during the Year.				Died out of Hospital during the Year.						Grand Total.	Escaped.	Released.	Transferred.	Total.	Grand Total.	Remaining.
				By Natural Causes.	Suicide.	Accident.	Total.	By Natural Causes.	Suicide.	Accident.	By Execution.	By Murder	Total.							
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.
From 1st January to 31st December 1861.																				
Male convicts	2,104	767	2,871	271	–	–	271	5	–	2	–	1	8	279	20	865	16	901	1,180	1,691
Female convicts	98	64	162	16	–	–	16	–	–	–	–	–	–	16	1	–	–	1	17	145
Total	2,202	831	3,033	287	–	–	287	5	–	2	–	1	8	295	21	865	16	902	1,197	1,836

APPENDIX No. 4.

LIST of CONVICTS who have Married at Port Blair.

MALE.						FEMALE.							REMARKS.
Date of Arrival at Port Blair.	Register Number.	Name.	Crime.	Name of Zillah where Imprisoned.	By what Court.	Date of Arrival at Port Blair.	Register Number.	Name.	Crime.	Name of Zillah where Imprisoned.	By what Court.	Date of Marriage at Port Blair.	
13 April 1858	458	Rutten Sing	Desertion	Jullundur	Commissioner	22 April 1860	4,124	Raj Kour	Accessory in murder.	Loodianah	By Judicial Commissioner, Punjab.	16 June 1860	The male released is employed as a havildar in Andaman police, at 10 rupees per mensem; supports himself and his wife.
17 July 1859	3,046	Tarah Sing	Instigating Mutiny.	Punjab	Judicial Commissioner, Punjab	22 ,, ,,	4,125	Mehtaboo	Murder	ditto	ditto	25 Mar. 1861	The male convict is supporting himself and his wife as a milkman.
2 April 1858	298	Jowarhir Sing	Mutiny against the State.	Sealkote	ditto	22 ,, ,,	4,126	Tabboo	Ditto	Jullundur	-	16 June 1860	The male convict is employed as a subdivision gangsman, at 10 rupees per mensem; supports himself and his wife.
22 April 1860	4,095	Tahir	Murder.	Jhelum	-	-	4,127	Avida	-	Jhelum	-	16 ,, ,,	Both are labouring convicts.
4 Feb. ,,	3,830	Juheeradee	Dacoity.	Jessore	Session Judge	30 Oct. 1860	4,140	Pearee	-	Cuttack	Nizamut Adawlut	14 ,, 1861	ditto - - - ditto.
10 Jan. 1859	1,963	Issarreah	Violation of Act V. of 1858.	Futtehpore	Special Commissioner and Session Judge.	30 ,, ,,	4,261	Heerah	Wilful murder and theft.	ditto	ditto	2 May ,,	ditto - - - ditto.
26 Jan. 1861	4,505	Bishtoo Ghose	Having belonged to a gang of Dacoits.	Hooghly	Additional Sessions Judge.	-	4,265	Umbica	Accomplice in murder.	West Burdwan.	-	30 Mar. ,,	ditto - - - ditto.
17 July 1859	3,058	Postee	ditto	Lahore	Judicial Commissioner.	-	4,266	Moojee Chosanee.	Murder	ditto	-	9 May ,,	The male convict supports himself and his wife by employ as a servant.
17 Nov. ,,	3,724	Neil Chund	Aiding and abetting in murder.	Nusseerabad	Nizamut Adawlut	-	4,267	Suruttee	Ditto	Dinagepore	-	26 Apr. ,,	Both are labouring convicts.
14 Feb. 1860	3,826	Hajee Mahomed	Wilful murder	Dinagepore	ditto	-	4,270	Jeerun	Ditto	ditto	-	30 Mar. ,,	ditto - - - ditto.
17 April ,,	3,986	Thobun	Dacoity	Jubbulpore	Judicial Commissioner.	-	4,271	Tetree	-	Patna	-	15 Apr. ,,	The male is a labouring convict, and the female self-supporting as a grain-grinder.
8 Oct. 1859	3,657	Kora	Murder	Nagpore	Commissioner	-	4,273	Radhee	-	Midnapore	-	15 ,, ,,	Both are labouring convicts.
6 Jan. 1860	3,768	Jadoo Shantra	Dacoity	Midnapore	Nizamut Adawlut	-	4,274	Munglee	Accomplice in murder.	ditto	-	30 Mar. ,,	ditto - - - ditto.
8 Oct. 1859	3,653	Kondea	Murder	Nagpore	Commissioner	-	4,275	Roopaiee	Wilful murder	Cuttack	-	19 ,, ,,	ditto - - - ditto.
8 ,, ,,	3,625	Gossaindoss Lyargee.	Dacoity	Hooghly	Additional Sessions Judge.	-	4,276	Sreemutty Arno.	Accomplice in murder.	Midnapore	-	5 Apr. ,,	The male convict is dead.
17 Nov. ,,	3,709	Hurry Jana	ditto	Midnapore	Nizamut Adawlut	-	4,279	Sukha	Murder	Rajshahye	-	2 July ,,	Both are labouring convicts.
7 Mar. ,,	2,467	Shama	Theft	Sirsa	Deputy Commissioner.	-	4,280	Kumla	Ditto	ditto	-	30 Mar. ,,	ditto - - - ditto.
8 Oct. ,,	3,676	Haniff Sheik	Dacoity	Moorshedabad	Sessions Judge	-	4,281	Poina	Ditto	ditto	-	15 Apr. ,,	ditto - - - ditto.
18 Feb. 1861	4,699	Nuffer Dome	ditto	Hooghly	Nizamut Adawlut	-	4,284	Sukkee	Attempt to murder.	Moorshedabad	-	15 ,, ,,	ditto - - - ditto.
30 July 1858	990	Busrama Kama	Aiding and abetting in murder.	Hazareebagh	Commissioner	-	4,285	Nowkoree	Ditto	ditto	-	19 July ,,	The male convict employed as a sawyer, and the female as a labouring convict.

Appendix No. 4.—List of Convicts who have Married at Port Blair—*continued.*

MALE.						FEMALE.							REMARKS.
Date of Arrival at Port Blair.	Register Number.	Name.	Crime.	Name of Zillah where Imprisoned	By what Court.	Date of Arrival at Port Blair.	Register Number.	Name.	Crime.	Name of Zillah where Imprisoned.	By what Court.	Date of Marriage at Port Blair.	
14 Feb. 1860	3,825	Bhothnath	Dacoity	Hooghly	Additional Sessions Judge.	-	4,286	Anundo	Murder	Moorshedabad	Nizamut Adawlut	28 Aug. 1861	Both are labouring convicts.
19 Oct. 1858	1,471	Kudiva Dome	ditto	Deoghur	Commissioner	-	4,287	Ponee Dossee	Ditto	Sylhet	-	12 „ „	The male is a labouring convict, and supports himself and his wife.
17 July 1859	3,081	Nehula	ditto	Loodianah	Deputy Commissioner.	-	4,289	Mookta	Ditto	Burdwan	-	1 May „	Both are labouring convicts.
6 Jan. 1860	3,769	Khetoo Barooer	ditto	Midnapore	Nizamut Adawlut	30 Oct. 1860	4,290	Maheshorry	Attempt to murder.	ditto	Nizamut Adawlut	19 June „	ditto - - - ditto.
19 Oct. 1858	1,629	Munroop	Escape from jail	Jhunpore	Sessions Judge	30 „ „	4,291	Kangalee	Wilful murder	ditto	ditto	9 May „	Both are supporting themselves by making earthen pots.
18 Feb. 1861	4,707	Malwar Khan	Dacoity	Hooghly	Nizamut Adawlut	30 „ „	4,293	Armany	Accomplice in murder.	Buckergunge	ditto	15 Apr. „	Both are labouring convicts.
8 Oct. 1859	3,656	Chumurea	Murder	Bundarah	Commissioner	-	4,294	Apee	Murder	Cuttack	-	15 „ „	The male is a labouring convict, supporting himself and his wife.
18 Feb. 1861	4,543	Koora	ditto	Saharunpore	Nizamut Adawlut	-	4,295	Bhoobun	Ditto	Hooghly	-	31 Oct. „	ditto - - - ditto.
11 Oct. 1858	1,395	Abdoollah	-	Rajhpore	Governor General's Agent.	-	4,296	Fukariny	-	Dinagepore	-	27 Apr. „	The male convict employed as a servant, and supporting himself and his wife.
14 Feb. 1860	3,818	Dood Mallick Sirdar.	Dacoity	Hooghly	Additional Sessions Judge.	-	4,297	Sookea	-	Agra	-	14 June „	Both are labouring convicts.
20 June 1861	5,187	Gopee Mohun	Riot, with very severe wounding and wilful defiance of lawful authority.	Patna	Nizamut Adawlut	-	4,298	Mooktakasay	Accomplice in the murder.	Beerbhoom	-	7 Oct. „	ditto - - - ditto.
11 Oct. 1858	1,396	Kalay Khan	Housebreaking	Asseer	Governor General's Agent.	-	4,299	Banshee	Murder	Chittagong	-	30 Mar. „	ditto - - - ditto.
8 Oct. 1859	3,668	Kadier Sirdar	Murder	Noacolly, Tipperah.	Sessions Judge	-	4,300	Khamessury	Ditto	ditto	-	31 May „	ditto - - - ditto.
8 „ „	3,669	Heerah Gajee Manjee.	ditto	ditto	ditto	-	4,301	Unjoony	Ditto	ditto	-	30 Mar. „	The male is a labouring convict, supporting himself and his wife.
26 Jan. 1861	4,519	Madhu Sing	ditto	Cuttack	ditto	-	4,302	Adhora	Ditto	Beerbhoom	-	5 Aug. „	Both are labouring convicts.
8 Oct. 1859	3,672	Shaik Goloo	-	Nusseerabad	ditto	-	4,303	Dabee Beebee	-	Sylhet	-	30 Mar. „	ditto - - - ditto.
15 April 1858	506	Munger Dhunnia.	Robbery and escape from gaol.	Jaunpore	ditto	-	4,304	Suleemun	-	Furreedpore	-	30 „ „	The male convict is employed as a gangsman at 5 rupees per mensem, and supports himself and his wife.
6 Jan. 1860	3,794	Chummon Rugwar.	Highway robbery	Behar	Commissioner under Act XIV. of 1857.	-	4,305	Sohagee	-	Mymensing	Nizamut Adawlut	30 „ „	Both are labouring convicts.
6 „ „	3,767	Kalachand Shantra.	Dacoity	Midnapore	Nizamut Adawlut	-	4,306	Khema	-	Beerbhoom	ditto	30 „ „	The female is dead.
6 April 1858	370	Shaik Kullun	Mutiny	Peshawur	General Court Martial.	-	4,307	Oomuree	Being in a gang of dacoits.	Agra	ditto	6 „ „	The male released is employed as a division gangsman at 15 rupees per month; supports himself and his wife.

17 Nov. 1859	3,712	Taykoola Moorung.	Accompice in the murder.	Chittagong	Nizamut Adawlut	-	4,309	Budiny	Wilful murder	Jaunpore	-	19 July 1861	Both are labouring convicts.
12 Mar. 1860	3,938	Annoo	Aggravated culpable homicide.	Lower Dugger.	Commissioner	-	4,311	Mirza	Murder	Backergunge	Sessions Judge	25 May „	The male is a labouring convict, supporting himself and his wife.
7 Mar. 1859	2,326	Shayday Khan	Dacoity with murder.	Mooltan	Commissioner and Superintendent	-	4,312	Jesseea	Ditto	ditto	ditto	17 July „	Both are labouring convicts.
10 Jan. „	1,951	Gopaul Soory	ditto	Hazareebaugh	Commissioner	-	4,314	Kettermony	Ditto	Hooghly	ditto	28 Dec. „	The male convict is supporting himself and his wife by selling betel leaves.
13 April 1858	410	Mungul Sing	Mutiny and desertion.	Rawul Pindee	ditto	-	4,315	Roopee	Wounding with intent to murder.	24-Pergunnahs	-	25 Mar. „	The male convict is employed as a gangsman at 5 rupees per month; supports himself and his wife.
12 Mar. 1860	3,959	Davee Jana	Dacoity	Midnapore	Additional Sessions Judge.	-	4,316	Khema	Accomplice in murder.	ditto	-	31 July „	Both are labouring convicts.
10 Mar. 1858	62	Mahboob Sheik	Sedition, robbery, and escape from jail.	Allahabad	Special Commissioner.	-	4,317	Jesseea	Murder	Patna	-	19 „ „	The male is a labouring convict, supports himself and his wife.
19 Oct. „	1,602	Kulloo Bhistee	Wilful murder	ditto	ditto	-	4,319	Boodhiny	Wilful murder	ChotaNagpore	-	2 „ „	Both are labouring convicts.
1 Sept. „	1,296	Kurrum Sing	Aiding and abetting in the murder.	Hazareebagh	Commissioner	-	4,322	Rujbee	Ditto	Goruckpore	-	14 June „	ditto - - - ditto.
15 April „	585	Mahisha Dhoby	Dacoity	ditto	ditto	-	4,323	Rookeea	Theft with murder.	Benares	-	7 Mar. „	Both are self-supporting as dhobies.
10 Jan. 1859	2,003	Dance	Dacoity with murder.	Allyghur	Special Commissioner.	-	4,324	Needhooee	Wilful murder	Jaunpore	-	2 Aug. „	Both are self-supporting by selling sweetmeats.
7 Mar. „	2,299	Jullah Shah	Wilful murder	Lahore	Judicial Commissioner.	3 Dec. 1860	4,413	Umero	Complicity in the murder.	Lahore	Judicial Commissioner.	30 Mar. „	The male is a labouring convict, supports himself and his wife.
22 April 1860	4,120	Jindhoo Khan	Wounding with intent to murder	Mooltan	ditto	3 „ „	4,414	Bhese	Wilful murder	ditto	ditto	12 Apr. „	The male convict is dead.
18 Feb. 1861	4,591	Hyderally	Theft with murder	Lahore	ditto	3 „ „	4,415	Dhurmo	ditto	ditto	ditto	25 May „	The female is dead; the male convict is self-supporting by selling sweetmeats.
8 Oct. 1859	3,652	Fukeera	Wilful murder	Nagpore	Commissioner	-	4,416	Chimma	Murder	Poonah	Sessions Judge	2 „ „	Both are labouring convicts.
18 Feb. 1861	4,533	Hushum	Dacoity with murder.	Moradabad	Nizamut Adawlut	-	4,417	Doodhee	Wilful murder	Ahmedabad	ditto	14 June „	The female is dead, and the male is a labouring convict.
14 Feb. 1860	3,817	Nukkye Khoonkar.	Dacoity	Hooghly	Additional Sessions Judge.	-	4,472	Apoorbah	ditto	Tipperah	ditto	28 Aug. „	ditto - - - ditto.
8 Oct. 1859	3,660	Kureem Buksh	Wilful murder	Nagpore	Commissioner	-	4,474	Pukee	Intent to murder	Tipperah	Sessions Judge	1 May „	Both are labouring convicts.
14 Feb. 1860	3,820	Asgar Sirdar	Dacoity	Hooghly	Additional Sessions Judge.	-	4,475	Edhonee	Wilful murder	-	-	15 Apr. „	ditto - - - ditto.
6 Jan. „	3,784	Pran Choundry	Theft	Shahabad	Sessions Judge and Judicial Commissioner.	-	4,476	Ootamee	Aiding and abetting in murder.	-	-	15 „ „	ditto - - - ditto.
20 Oct. 1858	1,791	Amed Khan	Robbery and murder.	Masulipatam.	Commissioner	-	4,477	Shooye	Wilful murder	-	-	31 Oct. „	Both are self-supporting by breeding fowls.
29 June 1861	5,141	Ahmud Khan	Theft	Agra	Nizamut Adawlut	-	4480	Rokina	Dacoity	Agra	Nizamut Adawlut	5 Dec. „	The male is a labouring convict, supporting himself and his wife.
12 Sept. 1859	3,595	Sahib Sing	Escape from gaol, and being in arms against the British Government.	Delhi	Special Commissioner.	-	4,481	Soodree	Murder	Cuttack	ditto	14 June „	Both are labouring convicts.
22 Apr. 1860	4,144	Borahan	Murder	Sirsa	Judicial Commissioner.	-	4,484	Sooratee	ditto	ditto	-	26 „ „	The male is a labouring convict, supporting himself and his family.
17 Nov. 1859	3,750	Leeang	River dacoity with murder.	Mergui	Commissioner	-	4,491	Moona	Felony	Singapore	Supreme Court	10 Apr. „	The female convict is dead, and the male is self-supporting.
18 Feb. 1861	4,725	Kindhur	Escape from gaol	Agra	Sessions Judge	18 Feb. 1861	4,530	Nisseya	Murder	Moradabad	Special Commissioner.	1 May „	Both are dead.

Appendix No. 4.—List of Convicts who have Married at Port Blair—*continued.*

MALE.						FEMALE.							
Date of Arrival at Port Blair.	Register Number.	Name.	Crime.	Name of Zillah where Imprisoned.	By what Court.	Date of Arrival at Port Blair.	Register Number.	Name.	Crime.	Name of Zillah where Imprisoned.	By what Court.	Date of Marriage at Port Blair.	REMARKS.
9 Aug. 1860	4,199	Futtah - -	Using firearms against the Authorities; plundering treasury and breaking gaol.	Mundlaisur -	Special Commissioner.	18 Feb. 1861	4,532	Dhapea -	Theft with murder	Meerut -	Sessions Judge -	19 Apr. 1861	Both are self-supporting, by making soap.
17 July 1859	3,077	Birjoo Kahir -	Wounding with intent to murder.	Jhelum -	Judicial Commissioner.	- -	4,560	Lutchmeenia -	Murder - -	Benares	Nizamut Adawlut	1 May „	Both are labouring convicts.
6 Jan. 1860	3,783	Buderam -	Administering drug with intent to rob.	Sarun -	Sessions Judge -	- -	4,574	Doolmee -	- ditto - -	- ditto -	- ditto - -	19 June „	- ditto - - - ditto.
8 Oct. 1859	3,663	Ooda - -	Murder - -	Nagpore -	Commissioner -	- -	4,596	Garee - -	. ditto - -	Jhansie -	- - - -	26 Apr. „	The male is a labouring convict; supports himself and his wife.
31 June 1861	5,155	Puchooa -	Escape from prison.	Agra -	Sessions Judge -	- -	4,606	Mendia -	- - -	Oude -	Chief Commissioner.	20 Aug. „	- ditto - - - ditto.
10 Jan. 1859	1,961	Abdool Guffoor	Accomplice in murder.	Allahabad -	Special Commissioner.	- -	4,610	Rusheedia -	Wilful murder -	Saugor -	Nizamut Adawlut	1 May „	The male convict is a gangsman at 5 rupees per month, and the female is a labouring convict.
29 June 1861	5,029	Bullaye -	Murder - -	Oude -	Judicial Commissioner.	- -	4,653	Phool Ghurreea.	Theft with murder	Allahabad -	- ditto - -	2 Nov. „	The male is a labouring convict; supports himself and his wife.
17 Apr. 1860	4,027	Ghasee - -	Breach of Act I of 1858.	Furruckabad	Special Commissioner.	- -	4,718	Kunwur -	Accessory before the fact in the murder	Saharunpore	- ditto - -	9 May „	- ditto - - - ditto.
17 Nov. 1859	3,745	Neepoh -	Wilful murder. -	Tavoy -	Commissioner -	1 May 1861	4,811	Laree - -	Murder - -	Poonah -	- - -	21 Oct. „	- ditto - - - ditto.
6 Apr. 1858	326	Bahadoor Alli	Mutiny and desertion.	Jhelum -	- ditto - -	1 „ „	4,814	Hussainma -	Accomplice in the murder.	Hyderabad -	Commissioner -	8 July „	- ditto - - - ditto.
18 Nov. 1861	5,258	Mustan Shah -	Attempt to murder.	Mysore -	Judicial Commissioner.	- -	4,818	Badur Ramee	Murder - -	Mysore -	Judicial Commissioner.	23 Nov. „	The male convict is a gangsman at 5 rupees per mensem, and supports himself and his wife.
2 Sept. 1859	3,357	Lal Sing -	Attempt of theft with murder, and escape from gaol.	Etawah -	Sessions Judge -	- -	4,819	Naghammah -	- ditto - -	Mangalore -	- - -	1 Nov. „	The male is a labouring convict, and supports himself and his wife.
20 July 1858	994	Bulakee Sing	Dacoity and plundering property.	Behar -	- ditto - -	- -	4,826	Taylummay -	- ditto - -	Papanassem	- - -	8 Nov. „	- ditto - - - ditto.
22 Apr. 1860	4,053	Maya - -	Wilful murder.	Kangra -	Judicial Commissioner.	- -	4,827	Beoorow -	Robbery and murder.	Chingleput -	- - -	25 May „	Both are labouring convicts.
29 June 1861	5,184	Ramoo - -	Theft with murder.	Tirhoot -	Nizamut Adawlut	1 May 1861	4,830	Dhemy -	Murder -	Luce Vanro	- - -	31 Oct. „	- ditto - - - ditto.
17 Nov. 1859	3,753	Kyeoung or Keong	Dacoity with murder.	Mergui -	Commissioner -	1 „ „	4,831	Lutchy - -	- ditto - -	- ditto -	- - -	9 „ „	The male convict is employed as a servant, and supports himself and his wife.
18 Nov. 1861	5,256	Bhowaneedeen	Being a poisoner by profession.	Lucknow -	Judicial Commissioner.	- -	4,834	Zahurun -	- ditto - -	Bareilly -	- - -	23 Nov. „	The male convict is employed as a gangsman at 5 rupees per month, and supports himself and his wife.

8 Oct. 1859	3,651	Ishuca	Wilful murder	Nagpore	Commissioner	-	4,836	Khullee	Accessory in the murder before and after the fact.	Lulcund	-	30 Sept. 1861	Both are self-supporting as fishermen.
11 May 1861	4,929	Azim	Murder	Lahore	Judicial Commissioner.	11 May 1861	4,971	Eymanah	Complicity in the murder.	Lahore	Judicial Commissioner.	13 July ,,	Both are self supporting as goldsmiths.
11 ,, ,,	4,928	Uttur Sing	Violent presumption of wilful murder.	Umritsur	ditto	11 ,, ,,	4,975	Sooltan Beebee	Wilful murder	ditto	ditto	19 ,, ,,	Both are labouring convicts.
11 ,, ,,	4,955	Mehudee Khan	Complicity in wilful murder.	Lahore	ditto	11 ,, ,,	4,976	Saloo	Accomplice in the murder.	ditto	ditto	17 ,, ,,	The female is dead.
—	4,941	Deen	Violent presumption of being an accomplice the in murder.	ditto	ditto	-	4,975	Hookmoo	Murder	-	-	6 Aug. ,,	Both are labouring convicts.
2 Sept. 1859	3,472	Mahomed Khan	Escape from goal	Bareilly	Special Commissioner.	-	4,990	Amba	ditto	Ahmednuggur.	Nizamut Adawlut	18 Oct. ,,	Both are self-supporting as dhobies.
17 Sept. 1860	4,004	Mukha	Thuggee	Lucknow	Judicial Commissioner.	-	4,992	Dearee	Accessory in the murder.	Durriabad	Commissioner and Superintendent	22 Aug. ,,	The male convict is employed as a gangsman, and supports himself and his wife.
29 June 1861	5,100	Chundee	Wilful murder	Nagpore	Deputy Commissioner.	-	4,993	Poonia	Infanticide	Seetapore	ditto	13 July ,,	Both are labouring convicts.
29 ,, ,,	5,143	Bhoja	Theft by administering poisonous drugs.	Allyghur	Nizamut Adawlut	29 June 1861	5,007	Gheese	Wilful murder	Moozuffernuggur.	Nizamut Adawlut	29 ,, ,,	ditto - - - ditto.
29 ,, ,,	5,048	Sadi Khan	Robbery	Jaunpore	Sessions Judge	29 ,, ,,	5,049	Bukreedeen	Robbery	Jaunpore	Sessions Judge	-	Married at Jaunpore. Both are labouring convicts.
18 Nov. ,,	5,261	Sheabuksh *alias* Enayette.	Theft with murder.	Cawnpore	Nizamut Adawlut	18 Nov. ,,	5,259	Banuoobee	Murder	Mysore	Judicial Commissioner.	-	Married at Moulmein. The male convict is a gangsman at 5 rupees per mensem, and supports himself and his wife.
22 Apr. 1860	4,090	Mada	Murder	Hoshearpore	Judicial Commissioner.	22 April 1860	4,122	Bunnoo	ditto	Hoshearpore	ditto	10 July 1860	Both were labouring convicts. On the 18th January 1861, both escaped; a portion of the clothes of the female have been found in possession of the aborigines.
22 ,, ,,	4,113	Dya Sing	Desertion	Meean Meer	General Court Martial.	22 ,, ,,	4,123	Suma	ditto	Hanesur	ditto	16 June ,,	The male convict is released and gone. He had quarrelled with his wife, and separated from her one year previous.
22 ,, ,,	4,136	Dawla	Murder	Hissar	Judicial Commissioner.	22 ,, ,,	4,137	Dhye	ditto	Hissar	ditto	2 July ,,	The male is a labouring convict, and supports himself and his wife.

Chap. VII.
Port Blair.

Appendix, No. 5.

Statement of Self-supporting Convicts present on the 31st December 1861.

Occupation.	No.	Occupation.	No.
Baniah	15	Milkmen	6
Bhurboonjahs	11	Charcoal dealers	4
Confectioners	14	Firewood sellers	2
Fishermen	25	Grain grinders	4
Potters	4	Sellers of miscellaneous articles	3
Washermen	12	Cloth sellers	2
Fowl breeders	11	Native ornament maker	1
Seller of vegetables	1	Tinker	1
Sellers of cooked food	6	Butcher	1
Bamboo workers	2	Pickle sellers	2
Tailors	11	Dyer	1
Barbers	10	Soap maker	1
Shoemakers	9	Bheesty	1
Goldsmiths	3	Coffeeshop keeper	1
Sellers of betel leaves	4	Servants	114
Pig breeder	1		
Bakers	3	Total	297
Gardeners	11		

Appendix No. 6.

Statement of Settlement Produce, not being Cattle, sold during the Year 1861.

				Rs.	a.	p.
Plantain	78,323	lbs.	1 Rupee per 32 and 64 lbs.	1,377	13	7
Brinjal	5,902	„	„ 32 lbs.	184	7	–
Colacasia	17,504	„	„ 64 „	273	12	9
Mauncuchoo	3,787	„	„ 64 „	59	7	9
Joowar	6,307	„	„ 32 „	197	1	6
Sugar-cane	43,749	„	„ 128 „	341	12	1
Chillies	226½	„	„ 12 „	18	14	2
Murrooa	2,757	„	„ 64 „	43	1	3
Indian corn	2,301	„	- - - - - -	30	2	10
Lowkee	854	„	1 Rupee per 64 lbs.	13	5	6
Yams	20,607	„	„ 32 „	643	11	–
Toorae	1,639	„	„ 64 „	24	13	7
Rozelle	2	„	„ 64 „	–	–	6
Paddy	420	„	- - - - - -	13	8	9
Pineapples	901	No.	- - - - - -	116	2	–
Arrowroot	181½	lbs.	⅔ Rupee per lb.	49	1	–
Coarse sugar	814	„	1 Rupee per 10 lbs.	81	6	5
Salt	7,625½	„	„ 20 „	381	4	4
Sag	211½	„	„ 64 „	3	4	6
Pumpkins	337	„	„ 64 „	5	4	3
Ginger	173	„	„ 16 „	10	13	6
Turmeric	32	„	„ 4 „	8	–	–
Kahkoonee	206	„	„ 64 „	6	6	–
Cucumber	395	„	„ 32 „	12	5	6
Radishes	24½	„	- - - - - -	–	8	9
Colacasia leaves	123	„	1 Rupee per 64 lbs.	1	14	9
Okra	462	„	„ 64 „	7	3	–
Kurrella	12	„	„ 32 „	–	6	–
Molasses	292	„	„ 32 „	4	9	–
Sweet potatoe	5,532	„	„ 64 „	86	7	3
Urher	434	„	„ 32 „	13	9	–
Ditto	36	„	„ 32 „	1	1	–
Miscellaneous	- - - - -		- - - - - -	215	–	7
			Total - - - Rs.	4,226	13	1

	Rs.	a.	p.
Of the above expended for Government purposes	460	13	3
„ sold	3,765	15	10

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Port Blair.

Appendix No 7.

Port Blair Shipping Return, for the Year ending 31st December 1861.

Arrivals and Departures.

ARRIVALS.			DEPARTURES.		
Description.	Number.	Tonnage.	Description.	Number.	Tonnage.
Steamers - - -	19	13,600	Steamers - -	19	13,600
Ships and Barques -	7	5,780	Ships and Barques -	8	6,280
Brigs - - -	4	1,150	Brigs - - -	4	1,150
Schooners - -	8	788	Schooners - -	8	788
Native craft - -	7	180	Native craft - -	7	180
Total - - -	45	21,498	Total - - -	46	21,990

Imports and Exports.

IMPORTS.				EXPORTS.			
Description.	Number or Weight.	Description.	Number.	Description.	Weight.	Description.	Number.
	Tons.				*Tons.*		
Coals - -	1,947	Bullocks	180	Ballast - -	1,450	Convicts -	892
Stores in general	1,500	Goats -	438	Coals - -	800	—	
		Sheep -	304	Timber - -	15	—	

Appendix No. 8.

Abstract Annual Return of Sick Convicts treated in the Settlement Hospital, *Port Blair*, from the 1st January to the 31st December 1861.

Port Blair, 1st January 1862.

CLASS OF DISEASES.	Remained 31st December 1860.	Admitted since.	Total.	Discharged cured.	Died.	Remaining 31st December 1861.	Remarks.
	MALES.						
Fevers	16	672	688	668	18	2	Average daily number of sick for the year { Males - - 113·4 Females - 16 } Fall of rain during the year - - - 156·68 inches.
Diseases of the lungs	1	32	33	25	8	—	
Diseases of the liver	–	2	2	–	1	1	
Diseases of the stomach and bowels	31	571	602	415	167	20	
Cholera	–	15	15	12	3	—	
Diseases of the brain	1	13	14	10	1	3	
Dropsies	–	11	11	6	2	3	
Rheumatic affections	2	42	44	36	2	6	
Venereal affections	–	3	3	3	–	—	
Abscesses and ulcers	14	251	265	235	14	16	
Wounds and injuries	6	87	93	88	1	4	
Diseases of the eye	2	23	25	22	2	1	
Diseases of the skin	1	16	17	17	–	—	
Other diseases	33	180	213	147	55	11	
Total	107	1,918	2,025	1,684	274	67	
	FEMALES.						
Fevers	15	208	233	219	4	—	
Diseases of the lungs	–	6	6	4	2	—	
Diseases of the stomach and bowels	–	20	20	14	6	—	
Dropsies	–	2	2	2	–	—	
Rheumatic affections	–	1	1	1	–	—	
Venereal affections	–	2	2	2	–	—	
Abscesses and ulcers	1	4	5	5	–	—	
Wounds and injuries	–	2	2	2	–	—	
Diseases of the eye	–	5	5	5	–	—	
Diseases of the skin	–	1	1	1	–	—	
Other diseases	–	15	15	12	2	1	
Total	16	266	282	267	14	1	
Grand Total	123	2,184	2,307	1,951	288	68	

NAVAL BRIGADE—1861

Deaths	None
Sick admitted	231
Number of sick sent away	2
Average sick per cent. to strength	3·9
Percentage of deaths to strength	—

Port Blair,
26 February 1862.

(signed) *L. Carthy*,
Second Apothecary.

Appendix No. 9.

Statement showing the Number of Male and Female Convicts admitted into the Settlement Hospital during the Year 1861, Average Strength, and the Per-centage of Admissions to Strength.

STATIONS.	Number Admitted.			Average Strength.			Percentage of Admissions to Strength.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average of both Sexes.
Ross Island	620	2	622	739	18	757	81·19	·97	82·16
Viper Island	788	20	808	600	23	623	125·07	4·62	129·69
Chatham Island	132	- -	132	273	- -	273	48·35	- -	48·35
Atalanta Point	378	244	622	344	91	435	113·07	29·91	142·98
Total	1,918	266	2,184	1,956	132	2,088			

(signed) *L. Carthy*, Second Apothecary, in Medical Charge.

Per-centage of admissions on average strength	114·3
Per-centage of deaths on average strength	15·0
Total number of cases treated	23·07
Deaths per cent. on number treated	12·48

Appendix No. 10.

Statement showing the Live Stock in the Settlement of *Port Blair* at the close of the Year 1861.

NAMES.	Government Property.	Property of Servants of Government and Convicts.	Total.	REMARKS.
Buffaloes	3	2	5	
Bulls	29	12	41	
Cows and Calves	- -	75	75	
Sheep, Lambs, &c.	136	21	157	
Pigs	34	57	91	
Goats	19	220	239	
Pony	1	- -	1	
Elephants	2	- -	2	

Appendix No. 11.

Statement showing the Duration of Residence at *Port Blair* of Convicts who died in 1861.

Over Two Years in Settlement.	Over One Year in Settlement.	Over Six Months in Settlement.	Over Three Months in Settlement.	Less than Three Months in Settlement.	Total.	REMARKS.
66	79	54	62	34	295	

CHAPTER VIII.

Chap. VIII.
Public Works.

PUBLIC WORKS DEPARTMENT.

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RETURN of Sanctioned Public Works Expenditure for 1861–62, compared with

GOVERNMENTS.	Particulars.	Area in Square Miles.	Population.	Revenue from all sources but Land.	Land Revenue.	Total Revenue.	SANCTIONED		
							ORIGINAL		
							Military Buildings.	Civil Buildings.	Agricultural Works.
				£.	£.	£.	£.	£.	£.
Madras - - -	Total - - - -	128,551	23,127,855	2,631,505	4,088,025	6,719,530	40,793	13,261	33,848
	Per square mile - -	1	179	20	31·8	52	·317	·104	·264
	Per million souls - -	5,558	1,000,000	113,780	176,757	290,538	1,771	581	1,475
	Per 100 *l.* of Miscellaneous Revenue - - -	4·88	879	100	155	255	1·55	·504	1·286
	Per 100 *l.* of Land Revenue	3·14	565	64	100	164	·997	·325	·828
	Per 100 *l.* of Total Revenue	1·91	344	39	60	100	·607	·197	·503
	Proportion of the whole -	- - -	- - -	- - -	- - -	- - -	*·06*	*·02*	*·05*
Bombay - -	Total - - - -	140,407	12,038,113	4,536,782	2,964,374	7,501,156	53,646	10,745	22,388
	Per square mile - -	1	86	32·3	21·2	53	·383	·076	·159
	Per million souls - -	11,663	1,000,000	376,868	246,249	623,117	4,453	884	1,849
	Per 100 *l.* of Miscellaneous Revenue - - -	3·09	265	100	65	165	1·182	·236	·494
	Per 100 *l.* of Land Revenue	4·73	406	153	100	253	1·809	·362	·756
	Per 100 *l.* of Total Revenue	1·87	164	60	39	100	·715	·144	·299
	Proportion of the whole -	- - -	- - -	- - -	- - -	- - -	*·1*	*·02*	*·04*
Bengal - - -	Total - - - -	277,000	40,852,397	10,188,982	4,024,290	14,213,272	17,499	32,339	25,184
	Per square mile - -	1	147	36·8	14·5	51	·063	·116	·091
	Per million souls - -	6,780	1,000,000	249,409	98,508	347,917	429	789	619
	Per 100 *l.* of Miscellaneous Revenue - - -	2·71	400	100	39	139	·171	·317	·247
	Per 100 *l.* of Land Revenue	6·88	1,015	253	100	353	·435	·804	·625
	Per 100 *l.* of Total Revenue	1·94	287	71	28	100	·123	·227	·177
	Proportion of the whole -	- - -	- - -	- - -	- - -	- - -	*·04*	*·06*	*·05*
N. W. Provinces -	Total - - - -	114,582	30,840,447	1,870,363	4,000,000	5,870,363	57,200	42,668	87,479
	Per square mile - -	1	269	16·3	34·9	51	·5	·372	·763
	Per million souls - -	3,715	1,000,000	60,646	129,699	190,345	1,859	1,383	2,837
	Per 100 *l.* of Miscellaneous Revenue - - -	6·12	1,648	100	213	313	3,058	2·281	4·677
	Per 100 *l.* of Land Revenue	2·86	771	46	100	146	1·430	1·066	2·186
	Per 100 *l.* of Total Revenue	1·95	525	31	68	100	·974	·726	1·490
	Proportion of the whole -	- - -	- - -	- - -	- - -	- - -	*·09*	*·07*	*·14*
Punjab - -	Total - - - -	95,600	15,467,821	1,093,082	1,792,384	2,885,466	19,784	11,922	74,053
	Per square mile - -	1	161	11·4	18·7	30	·207	·125	·774
	Per million souls - -	6,180	1,000,000	70,668	115,878	186,546	1,286	776	4,808
	Per 100 *l.* of Miscellaneous Revenue - - -	8·74	1,415	100	164	264	1·809	1·090	6·775
	Per 100 *l.* of Land Revenue	5·33	862	61	100	161	1·104	·666	4·132
	Per 100 *l.* of Total Revenue	3·31	536	37	62	100	·685	·413	2·566
	Proportion of the whole -	- - -	- - -	- - -	- - -	- - -	*·03*	*·02*	*·14*

the Extent, Population, and Revenue of the Several Local Governments of India.

EXPENDITURE. (N.B.—It has in many cases been left to the Local Governments to alter the Allotment within the Total Amount allowed.)

WORKS.			REPAIRS.						Establishment Charges.	Reserved for unforeseen Requirements and Petty Works.	GRAND TOTAL.
Communications.	Miscellaneous Public Works.	Total.	Military Buildings.	Civil Buildings.	Agricultural Works.	Communications.	Miscellaneous Public Works.	Total.			
£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
102,043	5,949	195,894	15,292	14,579	100,000	107,964	1,628	239,463	170,000	54,643	660,000
·793	·046	1·524	·119	·114	·778	·839	·013	1·863	1·32	·426	5·133
4,430	257	8,514	664	637	4,346	4,687	73	10,407	7,374	2,380	28,675
3·877	·226	7·443	·581	·554	3·8	4·103	·061	9·099	6·460	2·077	25·079
2·496	·145	4·791	·375	·356	2·446	2·641	·039	5·857	4·159	1·337	16·144
1·519	·089	2·915	·227	·216	1·488	1·607	·025	3·563	2·530	·814	9·822
·16	*·01*	*·3*	*·03*	*·02*	*·15*	*·16*	- -	*·36*	*·26*	*·08*	*1·00*
54,531	40,720	182,030	23,928	12,887	42,096	68,960	255	148,126	116,709	53,135	500,000
·388	·29	1·296	·171	·092	·299	·491	·002	1·055	·832	·378	3·561
4,511	3,372	15,069	1,989	1,069	3,477	5,709	23	12,267	9,674	4,396	41,406
1·202	·898	4·012	·527	·284	·927	1·521	·006	3·265	2·572	1·172	11·021
1·839	1·374	6·140	·807	·435	1·420	2·326	·008	4·996	3·937	1·792	16·865
·725	·543	2·426	·319	·171	·562	·919	·003	1·974	1·556	·709	6·665
·11	*·09*	*·36*	*·05*	*·02*	*·09*	*·14*	- -	*·3*	*·23*	*·11*	*1·00*
117,481	- -	192,503	24,950	33,520	22,727	53,481	922	135,600	114,000	67,897	510,000
·424	- -	·694	·09	·121	·082	·193	·003	·489	·411	·246	1·84
2,884	- -	4,721	612	823	558	1,312	21	3,326	2,796	1,673	12,516
1·154	- -	1·889	·244	·328	·223	·525	·010	1·330	1·119	·667	5·005
2·919	- -	4·783	·619	·833	·565	1·329	·023	3·369	2·832	1·688	12·672
·827	- -	1·354	·175	·236	·159	·377	·007	·954	·802	·477	3·587
·23	- -	*·38*	*·05*	*·07*	*·04*	*·10*	- -	*·26*	*·23*	*·13*	*1·00*
125,496	3,993	316,836	37,800	14,242	34,250	47,984	144	134,420	115,744	63,000	630,000
1·095	·035	2·765	·33	·124	·299	·42	- -	1·173	1·011	·549	5·498
4,070	130	10,279	1,227	461	1,111	1,561	- -	4,360	3,758	2,041	20,438
6·709	·214	16·939	2·023	·763	1·833	2·567	- -	7·186	6·188	3·369	33·682
3·138	·100	7·920	·946	·357	·857	1·200	- -	3·360	2·894	1·576	15·750
2·138	·069	5·397	·644	·243	·584	·818	- -	2·289	1·971	1·073	10·730
·2	- -	*·5*	*·06*	*·02*	*·05*	*·08*	- -	*·21*	*·19*	*·1*	*1·00*
114,587	6,810	227,156	20,000	4,158	26,864	63,072	371	114,465	124,973	53,406	520,000
1·199	·071	2·376	·209	·044	·281	·659	·004	1·197	1·307	·559	5·439
7,447	441	14,758	1,298	273	1,746	4,093	24	7,434	8,118	3,472	33,782
10·483	·624	20·781	1·829	·381	2·457	5·771	·033	10,471	11·433	4·885	47·570
6·392	·379	12·673	1·116	·232	1·499	3·518	·021	6·386	6·972	2·980	29·011
3·972	·236	7·872	·693	·144	·932	2·185	·012	3·966	4·332	1·651	18·021
·23	*·01*	*·43*	*·04*	*·01*	*·05*	*·12*	- -	*·22*	*·24*	*·11*	*1·00*

RETURN of Sanctioned Public Works - - - - -

GOVERNMENTS.	Particulars.	Area in Square Miles.	Population.	Revenues from all Sources but Land.	Land Revenue.	Total Revenue.	SANCTIONED		
							ORIGINAL		
							Military Buildings.	Civil Buildings.	Agri-cultural Works.
				£.	£.	£.	£.	£.	£.
Oudh - - -	Total - - - -	25,000	7,000,000	258,314	1,014,156	1,272,470	51,652	20,372	- -
	Per square mile - -	1	280	10·3	40·5	50	2·066	·814	- -
	Per million souls - -	3,571	1,000,000	36,902	144,879	181,781	7,379	2,907	- -
	Per 100 *l.* of Miscellaneous Revenue - - -	9·68	2,709	100	392	492	19·996	7·886	- -
	Per 100 *l.* of Land Revenue	2·46	689	25	100	125	5·093	2·008	- -
	Per 100 *l.* of Total Revenue	1·96	550	20	79	100	4·059	1·601	- -
	Proportion of whole - -	- -	- -	- -	- -	- -	*·27*	*·11*	- -
Nagpoor - - -	Total - - - -	70,000	4,000,000	96,492	281,633	378,125	4,291	12·943	- -
	Per square mile - -	1	57	1·3	4	5	·061	·185	- -
	Per million souls - -	17,500	1,000,000	24,123	70,408	94,531	1,070	3,246	- -
	Per 100 *l.* of Miscellaneous Revenue - - -	72·5	4,145	100	291	391	4·447	13·413	- -
	Per 100 *l.* of Land Revenue	24·85	1,428	34	100	134	1·523	4·595	- -
	Per 100 *l.* of Total Revenue	18·51	1,057	25	74	100	1·135	3·423	- -
	Proportion of whole - -	- -	- -	- -	- -	- -	*·05*	*·15*	- -
Pegu - - -	Total - - - -	32,250	948,731	424,345	113·049	537,394	22,488	7,445	- -
	Per square miles - -	1	29	13·1	3·5	16	·698	·231	- -
	Per million souls - -	33,992	1,000,000	445,168	121,266	566,434	24,069	7,966	- -
	Per 100 *l.* of Miscellaneous Revenue - - -	7·59	223	100	26	126	5·299	1·755	- -
	Per 100 *l.* of Land Revenue	28·52	842	375	100	475	19·892	6·586	- -
	Per 100 *l.* of Total Revenue	6·0	176	79	21	100	4·184	1·354	- -
	Proportion of whole - -	- -	- -	- -	- -	- -	*·22*	*·07*	- -
Tenasserim and Martaban Provinces. * Includes Alguada Lighthouse, £. 17,500.	Total - - - -	38,000	339,264	140,030	43,078	183,108	210	5,028	- -
	Per square mile - -	1	9	3·6	1·1	4	·005	·132	- -
	Per million souls - -	112,007	1,000,000	412,746	126,975	539,721	555	14,667	- -
	Per 100 *l.* of Miscellaneous Revenue - - -	27·13	242	100	30	130	0·149	3·591	- -
	Per 100 *l.* of Land Revenue	88·21	787	325	100	425	·487	11·672	- -
	Per 100 *l.* of Total Revenue	20·75	185	76	24	100	·114	2·746	- -
	Proportion of whole - -	- -	- -	- -	- -	- -	- -	*·13*	- -
Straits - - -	Total - - - -	1,575	275,022	139,499	10,715	150,214	11,277	5,036	453
	Per square mile - -	1	175	88·5	6·8	95	7·16	3·197	·287
	Per million souls - -	5,726	1,000,000	507,228	38,960	546,188	40,914	18·269	1,640
	Per 100 *l.* of Miscellaneous Revenue - - -	1·12	197	100	7	107	8·083	3·611	·324
	Per 100 *l.* of Land Revenue	14·69	2,566	1,302	100	1,402	105·246	46·999	4,228
	Per 100 *l.* of Total Revenue	1·04	183	92	7	100	7·508	3·353	·301
	Proportion of whole - -	- -	- -	- -	- -	- -	*·28*	*·12*	*·02*
Hyderabad - - (British Charges.)	Total - - - -	- -	- -	- -	- -	- -	19,200	- -	- -
	Per square mile - -								
	Per million souls - -								
	Per 100 *l.* of Miscellaneous Revenue - - -	- - Military Buildings in the Cantonments of Secunderabad and Julnah, and Roads in the Nizam's							
	Per 100 *l.* of Land Revenue								
	Per 100 *l.* of Land Revenue								
	Proportion of whole - -	- -	- -	- -	- -	- -	*·45*	- -	- -

- - - - Expenditure for 1861–62—*continued.*

EXPENDITURE. (N.B.—It has in many cases been left to the Local Governments to alter the Allotment within the Total Amount allowed.)

WORKS.			REPAIRS.						Establishment Charges.	Reserved for unforeseen Requirements and Petty Works.	GRAND TOTAL.
Communications.	Miscellaneous Public Works.	Total.	Military Buildings.	Civil Buildings.	Agricultural Works.	Communications.	Miscellaneous Public Works.	Total.			
£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
51,733	- -	123,757	5,000	2,750	- -	12,284	- -	20,034	22,485	23,724	190,000
2·07	- -	4·95	·2	·11	- -	·491	- -	·801	·9	·949	7·6
7,392	- -	17,678	715	393	- -	1,753	- -	2,861	3,214	3,389	27,142
20·027	- -	47·909	1·935	1·064	- -	4·756	- -	7·755	8·704	9·185	73·553
5·101	- -	12·202	·493	·271	- -	1·211	- -	1·975	2·217	2·340	18·734
4·065	- -	9·725	·392	·216	- -	·966	- -	1·574	1·767	1·864	14·930
·28	- -	*·66*	*·02*	*·01*	- -	*·07*	- -	*·1*	*·12*	*·12*	*1·00*
42,520	- -	59,754	1,580	195	375	2,065	- -	4,215	15,631	5,400	85,000
·608	- -	·854	·023	·003	·005	·029	- -	·06	·223	·077	1·214
10,666	- -	14,982	404	52	88	508	- -	1,052	3,912	1,351	21,297
44·066	- -	61·926	1·637	·202	·388	2·141	- -	4·368	16·199	5·597	88·090
15·098	- -	21·216	·561	·069	·133	·733	- -	1·496	5·551	1·918	30·181
11·245	- -	15·303	·417	·051	·099	·547	- -	1·114	4·134	1·428	22·479
·5	- -	*·7*	*·02*	- -	- -	*·03*	- -	*·05*	*·18*	*·07*	*1·00*
6·010	8,047	43,990	13,000	2,808	71	5,697	3,884	25,460	17,934	17,616	105,000
·186	·249	1·364	·403	·087	00·2	·176	·12	·788	·556	·546	3·254
6,413	8,586	47,034	13,896	3,000	69	6,069	4,138	27,172	19,172	18,828	112,206
1·417	1·896	10·367	3·064	0 662	0·016	1·342	0·915	5·999	4·226	4·152	24·744
5·316	7·118	38·912	11·499	2·485	·063	5·039	3·436	22·522	15·864	15·582	92·880
1·119	1·498	8·185	2·419	0·522	·013	1·060	·723	4·737	3·337	3·278	19·537
·05	*·07*	*·41*	*·13*	*·03*	- -	*·05*	*·04*	*·25*	*·17*	*·17*	*1·00*
1,679	* 21,964	28,881	2,200	900	- -	400	1,100	4,600	3,705	2,314	39,500
·044	·579	·760	·057	·024	- -	·011	·029	·121	·097	·061	1·039
4,889	64,333	84.444	6,334	2,666	- -	1,222	3,222	13,444	10,778	6,778	115,444
1·199	15·686	20·625	1·571	0·643	- -	0·285	0·786	3·285	2·646	1·652	28·208
3·897	50·987	67·043	5·108	2·089	- -	·928	2·553	10·678	8·601	5·372	91·694
·917	11·996	15·773	1·201	0·492	- -	·218	·601	2·512	2023	1·263	21·571
·05	*·56*	*·74*	*·06*	*·02*	- -	*·01*	*·02*	*·11*	*·09*	*·06*	*1·00*
2,729	1,522	21,017	737	1,452	- -	1,364	176	3,729	8,429	6,825	40,000
1·733	·967	13·344	·468	·922	- -	·866	·111	2·367	5·352	4·333	25·396
9,903	5,525	76,251	2,674	5,269	- -	4,949	634	13,526	30,583	24,760	145,120
1·957	1·092	15·067	0·528	1 041	- -	·978	·126	2·673	6·042	4 892	28·674
25·468	14·205	196·146	6·878	13·552	- -	12·729	1·642	34·801	78·666	63·695	373·303
1·817	1·013	13·992	·491	·966	- -	·908	·117	2·482	5·611	4·543	26·628
·06	*·04*	*·52*	*·02*	*·05*	- -	*·03*	- -	*·1*	*·21*	*·17*	*1·00*
5,200	- -	24,400	2,200	700	- -	2,320	- -	5,220	7,410	5,470	42,500
Dominions.											
·12	- -	*·57*	*·06*	*·01*	- -	*·05*	- -	*·12*	*·18*	*·13*	*1·00*

RETURN of Sanctioned Public Works - - - - - - - - -

GOVERNMENTS.	Particulars.	Area in Square Miles.	Population.	Revenue from all Sources but Land.	Land Revenue.	Total Revenue.	SANCTIONED		
							ORIGINAL		
							Military Buildings.	Civil Buildings.	Agricultural Works.
				£.	£.	£.	£.	£.	£.
Coorg - - - -	Total - - - - -	2,204	118,464	26,000	14,000	40,000	- -	- -	- -
	Per square mile - -	1	54	11·8	6·4	18	- -	- -	- -
	Per million souls - -	18,604	1,000,000	219,476	118,179	337,655	- -	- -	- -
	Per 100 *l.* of Miscellaneous Revenue - - -	8·47	455	100	54	154	- -	- -	- -
	Per 100 *l.* of Land Revenue	15·74	846	185	100	285	- -	- -	- -
	Per 100 *l.* of Total Revenue	5·51	296	65	35	100	- -	- -	- -
	Proportion of the whole -	- -	- -	- -	- -	- -	- -	- -	- -
TOTAL BRITISH -	Total - - - - -	925,169	135,008,114	21,405,394	18,345,704	39,751,098	298,040	161,759	243,405
	Per square mile - -	1	146	23·1	19·8	42	·322	·175	·263
	Per million souls - -	6,852	1,000,000	158,549	135,885	294,434	2,205	1,199	1,802
	Per 100 *l.* of Miscellaneous Revenue - - -	4·32	630	100	85	185	1·392	0·755	1·137
	Per 100 *l.* of Land Revenue	5·04	735	116	100	215	1·624	0·882	1·326
	Per 100 *l.* of Total Revenue	2·32	339	54	46	100	0·749	0·407	0·613
	Proportion of the whole -	- -	- -	- -	- -	- -	*·09*	*·05*	*·07*
Hyderabad Assigned Districts - -	Total - - - - -	25,624	2,017,647	466,100	412,000	878,100	875	2,230	100
	Per square mile - -	1	79	18·2	16	34	·034	·087	·004
	Per million souls - -	12,699	1,000,000	231,011	204,198	435,209	430	1,101	50
	Per 100 *l.* of Miscellaneous Revenue - - -	5·49	433	100	88	188	·188	·478	·022
	Per 100 *l.* of Land Revenue	6·21	489	113	100	213	·212	·542	·024
	Per 100 *l.* of Total Revenue	2·91	229	53	47	100	·099	·255	·011
	Proportion of the whole -	- -	- -	- -	- -	- -	*·08*	*·2*	- -
Mysore - - -	Total - - - - -	27,000	3,822,000	900,000	677,300	1,577,300	- -	4,928	4,234
	Per square mile - -	1	141	33·3	25	58	- -	·183	·156
	Per million souls - -	7,064	1,000,000	235,478	177,211	412,689	- -	1,298	1,107
	Per 100 *l.* of Miscellaneous Revenue - - -	3	424	100	75	175	- -	·547	·470
	Per 100 *l.* of Land Revenue	3·98	564	133	100	233	- -	·727	·625
	Per 100 *l* of Total Revenue	1·71	242	57	43	100	- -	·312	·269
	Proportion of the whole -	- -	- -	- -	- -	- -	- -	*·05*	*·04*
GRAND TOTAL -	Total - - - - -	977,793	140,847,761	22,771,494	19,435,004	42,206,498	298,915	168,917	247,739
	Per square mile - -	1	144	23·3	19·8	43	·306	·173	·253
	Per million souls - -	6,492	1,000,000	161,674	137,986	299,660	2,125	1,201	1,757
	Per 100 *l.* of Miscellaneous Revenue - - -	4·28	618	100	85	185	1·313	·742	1·087
	Per 100 *l.* of Land Revenue	5·03	723	117	100	217	1·539	·869	1·275
	Per 100 *l.* of Total Revenue	2·32	333	54	46	100	·708	·401	·587
	Proportion of the whole -	- -	- -	- -	- -	- -	*·09*	*·05*	*·07*

The revenue for Madras, Bengal, Bombay, North Western Provinces, Punjab, the Straits Settlements, Oudh and Nagpoor is taken from a Statement of the Financial Department of 3d June 1861. The revenue for Pegu and the Tenasserim and Martaban Provinces not being separately shown in the Statement of the Financial Department is taken in the proportion shown in the Statement of this Department, published for last year. For Mysore, Coorg, and Hyderabad the revenue is taken from returns for 1861–62 furnished by the authorities in those Provinces. The area and population for Madras, Bengal, Punjab, the Straits Settlements, Oudh, Nagpoor, Tenasserim and Martaban Provinces, Mysore, Coorg, and Hyderabad are taken from returns for 1860–61, furnished by the local authorities. For Bombay the area and population are the same as given in the Statement published by this Department for last year; and for the North Western Provinces and Pegu, the data are taken from the Administration Reports of those Provinces for 1859–60.

Expenditure for 1861-62—*continued.*

EXPENDITURE. (N.B.—It has in many cases been left to the Local Governments to alter the Allotment within the Total Amount allowed.)

Works.			Repairs.						Establishment Charges.	Reserved for unforeseen Requirements and Petty Works.	Grand Total.
Communications.	Miscellaneous Public Works.	Total.	Military Buildings.	Civil Buildings.	Agricultural Works.	Communications.	Miscellaneous Public Works.	Total.			
£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
1,080	- -	1,080	165	270	425	310	- -	1,170	- -	250	2,500
·49	- -	·49	·074	·123	·193	·141	- -	·531	- -	·113	1·134
9,074	- -	9,074	1,370	2,277	3,575	2,611	- -	9,833	- -	2,093	21,000
4·154	- -	4·154	·635	1·038	1·634	1·193	- -	4·500	- -	·961	9·615
7·714	- -	7·714	1·778	1·929	3·036	2·215	- -	8·358	- -	1·785	17·857
2·700	- -	2·700	·412	·675	1·063	·775	- -	2·925	- -	·625	6·250
·43	- -	*·43*	*·06*	*·11*	*·17*	*·13*	- -	*·47*	- -	*·1*	*1·00*
625,089	89,005	1,417,298	146,852	88,461	225,808	365,901	8,480	836,502	717,020	353,680	3,324,500*
·675	·096	1·531	·158	·096	·245	·396	·009	·904	·775	·383	3·593
4,623	657	10,486	1,082	658	1,678	2,712	62	6,192	5,308	2,623	24,609
2·921	0·416	6·621	·687	·414	1·059	1·709	·039	3·908	3·350	1·552	15·531
3·408	0·485	7·725	·801	·482	1·236	1·994	·046	4·559	3·909	1·928	18·121
1·573	0·224	3·566	·369	·222	·571	·921	·021	2·104	1·804	·889	8·363
·18	*·03*	*·42*	*·04*	*·03*	*·07*	*·11*	- -	*·25*	*·22*	*·11*	*1·00*
13,435	- -	4,640	200	350	- -	1,650	- -	2,200	3,900	860	11,600
·056	- -	·181	·008	·014	- -	·064	- -	·086	·152	·033	·452
710	- -	2,291	101	177	- -	810	- -	1,088	1,924	418	5,721
·308	- -	·996	·043	·075	- -	0·354	- -	·472	·836	·184	2·488
·349	- -	1·127	·048	·085	- -	·400	- -	·533	·946	·209	2·815
·164	- -	·529	·023	·039	- -	·189	- -	·251	·444	·097	1·321
·12	- -	*·4*	*·01*	*·03*	- -	*·15*	- -	*·19*	*·33*	*·08*	*1·00*
13,035	3,849	26,046	- -	1,870	20,149	22,777	320	45,116	18,838	10,000	100,000
·482	·143	·964	- -	·07	·746	·843	·012	1·671	·697	·371	3·703
3,418	1,014	6,837	- -	496	5,291	5,979	85	11,851	4,943	2,631	26,262
1·449	·428	2·894	- -	·209	2·236	2·532	·036	5·013	2·093	1·111	11·111
1·925	·568	3·845	- -	·276	2·975	3·363	·048	6·662	2·781	1·476	14·764
·826	·244	1·651	- -	·117	1·278	1·445	·020	2·860	1·194	·634	6·339
·13	*·04*	*·26*	- -	*·02*	*·2*	*·23*	- -	*·45*	*·19*	*·1*	*1·00*
639,559	92,854	1,447,984	147,052	90,681	246,9	390,328	8,800	883,818	739,758	364,540	3,436,100
·654	·095	1·481	·15	·093	·252	·399	·009	·903	·757	·373	3·514
4,542	659	10,284	1,042	646	1,750	2,771	62	6,271	5,257	2,590	24,402
2·809	·408	6·359	·646	·399	1·084	1·714	·038	3·881	3·248	1·601	15·089
3·290	·477	7·450	·756	·466	1·271	2·009	·045	4·547	3·806	1·876	17·67
1·516	·219	3·431	·348	·215	·586	·925	·020	2·094	1·752	0·864	8·14
·19	*·02*	*·42*	*·04*	*·02*	*·07*	*·12*	- -	*·25*	*·22*	*·11*	*1·00*

		£.	£.
* To complete the estimated British Public Works Expenditure, exclusive of local funds, the following is added to the sum of		- -	3,324,500
Additional Assignment to Punjab, for the Lahore and Peshawur road (transferred from grant for railway land)		- -	20,000
Ditto - ditto - to Bombay		- -	25,000
Ditto - ditto - to Tenasserim and Martaban Provinces		- -	500
Minor demands on the Government of India - Iron works and Civil buildings in Nimar	£. 4,966		
Civil buildings, Ajmere	300	5,266	
Not yet distributed		9,733	15,000
Balance of Reserve at the disposal of the Government of India in this Department		- -	23,940
Government outlay for Railway Establishment and land		- -	200,165
Electric Telegraph charges		- -	65,895
Total - - - £.			3,675,000

Chap. VIII.
Public Works.

REPORT of Proceedings in the Public Works Department, during the Official Year 1861–62.

FINANCIAL AND ACCOUNTS.

Prefixed to this Report is the usual Tabular Statement showing the Expenditure of the Public Works Department under the several Local Governments for the year 1861–62, as sanctioned by the Government of India, compared with the area, population and revenue of the respective Presidencies and Provinces.

From this statement it will be seen that the whole estimated expenditure chargeable to the British Government, exclusive of outlay from local funds, was about three and three-quarter millions sterling, viz.:

	£.
Disbursed in the Public Works Department - - - - - -	3,408,940
Disbursed in the Home Department for the Electric Telegraph -	65,895
Government outlay for railway contract and purchase of land -	200,165
Total - - - £.	3,675,000

Besides this the expenditure in Mysore and the Hyderabad assigned districts, chargeable to the provinces, but disbursed by the officers of the Public Works Department, was estimated at 111,600*l.* The total Public Works expenditure in India for 1861–62 was therefore estimated at 3,786,600*l.*

The allotments to the several Governments, the per-centage on revenue, and outlay per square mile, and per head of population, are shown below:—

GOVERNMENTS.	Allotments.	Per Cent. of Revenue.	Per Cent. per Square Mile.	Per Head of Population.
	£.	£.	£.	*s.* *d.*
Madras - - - - - - -	660,000	9·8	5·1	– 6
Bombay - - - - - -	525,000	6·9	3·7	– 10
Bengal - - - - - -	510,000	3·5	1·8	– 3
North Western Provinces - -	630,000	10·7	5·5	– 4
Punjab - - - - - - -	540,000	18·7	5·6	– 8
Oudh - - - - - - -	190,000	14·9	7·6	– 6
Nagpoor - - - - - -	85,000	22·4	1·2	– 5
Pegu - - - - - - - -	105,000	19·5	3·3	2 2
Tenasserim and Martaban Provinces	40,000	21·8	1·1	2 4
Straits - - - - - - -	40,000	26·6	25·4	2 10
Hyderabad (British Charges) -	42,500	This outlay is only on buildings connected with troops and roads in the Nizam's dominions.		
Coorg - - - - - - -	2,500	6·2	1·1	– 5

Including the sum set down for unforeseen requirements and petty works, the expenditure sanctioned for *new* works is 53 per cent. of the whole; 25·5 per cent. is for repairs; and 21·5 per cent. for supervising establishments, consisting of engineers and their subordinates, with the offices for correspondence, drawing, estimating, accounts and audit.

The outlay in the Public Works Department in pounds sterling is thus classified:—

	New Works.	Per Centage of Total Outlay.	Repairs.	Per Centage of Total Outlay.	Total.	Per Centage of Total Outlay.
	£.		£.		£.	
Military Buildings -	298,915	8	147,052	4·2	445,967	12·2
Civil - - - -	168,917	5	90,681	3	259,598	8
Agricultural Works -	247,739	7	246,957	7	494,696	14
Communications -	639,559	19	390,328	11·3	1,029,887	30·3
Miscellaneous Public Works.	92,854	3	8,800	- -	101,654	3
	1,447,984	42	883,818	25·5	2,331,802	67·5
Reserved for unforeseen requirements and petty works - - -					364,540	11
Establishment charges - - - - - - - - - - -					739,758	21·5
Grand Total - - -					3,436,100	100

Subjoined is a List of the most important Works on which Expenditure was sanctioned, with the respective amounts intended to be spent upon each in course of the twelve months:—

LIST of the Principal Original Works included in the foregoing Return.

	NATURE OF WORKS.	Estimated Cost.	Expended up to 30 April 1861.	Sanctioned for 1861–62.
	MADRAS.	£.	£.	£.
Military	Alterations to the fortifications of Fort St. George	35,427	27,346	8,081
	Barrack accommodation at Bellary	24,094	2,905	11,565
	" at Fort St. George	6,010	4,656	1,354
	" at Mysore	59,225	22,925	15,000
	" at Wellington	3,906	2,879	1,026
	Improving the drainage of Fort St. George	5,000	2,011	2,989
Judicial	Judicial buildings at Salem	11,267	10,060	1,207
General	Completing a building for the Dowlaishwaram workshop, Godavery	2,186	- -	2,186
	New wing to General Hospital, Madras	6,650	3,570	3,080
Marine	Improvement of Cocanada Harbour, Godavery	4,125	- -	2,500
	Pier at Beitkul Bay, North Canara	5,100	- -	2,800
Agricultural	Calingulah across the Jammravu Channel and branch channels in the Amlapur and Rilli Taluqs, Godavery	5,913	5,698	215
	Canal from Weyeru, near the Godavery Annicut, to Ellore	28,764	27,614	1,150
	Channels in the Biccavole, Nagarum and Tanookoo Taluqs, Godavery	2,100	1,741	359
	High level channel from Budumair to Perikid, and thence to Dendaber, Kistna	21,438	15,158	6,281
	Channel from Puleru, near Weyur, to the Canal Basin, Kistna	25,983	18,464	4,500
	Widening, &c., the Toongabudra Channel, &c., in Nizampatam, Kistna	24,046	17,775	2,105
	Additional lock and calingulah in the Nizampatam Channel, Kistna	3,460	- -	2,600
	Two new channels in the Eastern Delta, Kistna	4,340	3,300	1,040
	Restoring the annicut across the Pennair at Nellore	11,250	9,156	2,094
	Palar annicut project	86,614	57,938	3,000
	Annicut across the Ponyaur, South Arcot	6,100	3,032	3,068
	New cut across the Peruvaly Channel, Trichinopoly	2,470	479	982
	Padapully Channel, Coimbatore	2,363	1,619	744
	Restoring the Chinna Orampad tank, Cuddapah	3,400	2,500	900
Communications	Metalled road from Yellapur to Beitkul Bay by the Kyga Ghât, North Canara	9,533	- -	3,000
	Metalled roads in Ganjam	13,374	3,056	4,341
	" from Ibrahimpatam to Nizam's Frontier, Kistna	4,417	2,147	1,500
	" from Durgurazpatam to Gudur	3,247	- -	3,247
	" from Cuddapah to Madras	12,824	3,803	1,087
	" in North Arcot	9,811	4,891	4,273
	" in South Canara	2,528	1,969	547
	" from Trichinopoly to Coimbatore	4,571	3,299	1,231
	" between Trichinopoly and Salem	2,230	- -	1,630
	" in Madura	13,366	5,034	4,021
	" in Tinnevelly	7,839	2,440	4,499
	" from Hallial to Sedasheogur, North Canara	12,640	2,640	2,500
	Completing and bridging the roads in Malabar	23,583	7,176	6,000
	Unmetalled road from Vencatramrazpett to Royachoty, Cuddapah	4,130	1,583	2,546
	Tracing a line of road for opening up the Wynad country to the coast by the Trichinopoly Pass	2,594	2,309	285
	Value of land, &c., for the new road to the Club, Presidency	4,300	- -	4,300
	Completing the Manteral Canamah Ghât, Kurnool	2,460	- -	1,500
	" Nandicanamah Ghât, Kurnool	5,000	4,000	1,000
	Bridges, &c., on Trunk Road, No. 6, Nellore	8,458	4,934	1,000
	Ditto across the Kundar, on the road from Kurnool to Nundicanamah	2,226	1,083	1,144
	Ditto in South Arcot	3,327	454	1,020
	Ditto in Tanjore	3,410	1,444	1,966
	Ditto in Canara	2,599	133	1,466
	Kalpatti Bridge, near Palghat, Malabar	2,300	1,000	1,300
	Improvement of the Upper Godavery works	118,300	- -	20,000
	Sinterala Barrier works	- -	- -	20,000
Minor works, not enumerated		- -	- -	19,665
		TOTAL	£.	195,894

LIST of the Principal Original Works—*continued.*

	NATURE OF WORKS.	Estimated Cost.	Expended up to 30 April 1861.	Sanctioned for 1861-62.
	BOMBAY.	£.	£.	£.
Military - -	Harbour defences, Bombay - - - - - - -	250,000	20,000	20,000
	Barrack accommodation at Mhow - - - - - -	57,397	22,000	17,500
	" at Jacobabad - - - -	7,158	6,758	400
	" at Aden - - - - - -	56,351	- -	8,000
	Additions, &c., to Belgaum Arsenal - - - - -	3,574	3,174	400
Naval - -	Hospital, Butcher's Island - - - - - - - -	3,814	- -	1,800
Revenue - -	Mamlutdars' Kutcherries at Surat, Candeish, Poona and Northern Concan - - - - - - - - -	2,471	- -	400
Marine - -	Improvement to the Kurrachee Harbour - - - -	137,000	24,000	40,000
Agricultural -	Tank in Bair, in the Bunkapoor Talooka - - - -	2,410	- -	1,000
	Mitrow Canal, Sindh - - - - - - -	42,315	9,541	12,000
Communications -	Metalled road between Scindwa Ghât and Beaur (Agra Road)	24,403	- -	15,000
	Ditto - over the Tenai Ghât - - - - -	6,000	- -	3,000
	Metalling portion of the Ahmedabad and Gogo Road between Gogo and Vertez - - - - - - - - -	2,188	- -	1,000
	Roads in Dharwar - - - - - - - - -	- -	- -	17,000
	Moorum Road, from Hooblee to Annigherrie - - -	8,884	434	2,500
	" from Sunguteekope to Hooblee - - -	6,223	756	2,000
	Fair-weather Road, from Adjunta to Asseerghur - - -	2,160	13	2,000
	Road from the junction of the Ahmednuggur and Candeish Collectorates to the Girna River - - - - - -	8,341	213	1,200
	Bridges on the road between Sattara and the Wurna River -	7,893	- -	3,000
	Ditto over Nullahs on the Gogo and Ahmedabad Road -	2,680	815	1,000
Minor works, not enumerated - - - - - - - - - - -		-	- -	32,830
		TOTAL - - - £.		182,030
	BENGAL.			
Military - -	Additions and alterations to Arsenal, Fort William - -	9,026	9,492	600
	Lightning conductors to Magazine, ditto - - -	1,456	1,000	1,700
	Land, &c., for the Cantonment at Dehree - - - -	- -	- -	5,142
	Barracks for half a regiment at ditto - - - -	- -	- -	1,500
	Military buildings at Bokyung, Arracan - - - -	- -	- -	1,000
Naval - -	Steam-hammer and boiler sheds, &c., in the Steam Yard at Kidderpoor - - - - - - - - - -	3,368	1,400	1,968
Judicial - -	Additions, &c., to the Great Gaol, Calcutta - - - - -	- -	- -	5,000
	Court-houses in sundry places - - - - - -	- -	- -	3,933
Revenue - -	Collector's Kutcherry at Mozufferpoor - - - - -	2,907	1,500	1,500
	" at Chuprah - - - - -	2,439	1,000	2,200
	" at Bhaugulpoor - - - - -	3,343	3,100	243
	Additions, &c., to the Opium Buildings at Goolzarbagh -	3438	3,000	438
Ecclesiastical -	Construction of St. James's Church on a new site - -	15,246	- -	2,500
General - -	New Copper Mint - - - - - - - - - -	26,243	10,000	12,000
Agricultural -	Sea embankments in Hidgellee - - - - - - -	- -	- -	19,000
	Embankments between the Huldee and Russelpoor Rivers -	5,280	5,030	250
	135 Sluices in the Mahanuddy Division - - - -	3,856	1,085	1,700
	83 " in the Pooree - - - - - - - -	2,623	1,203	1,200
Communications -	Metalled road from Caragolah to Tytaliah - - - -	34,800	34,800	17,000
	" from Jeagunge to Nulhatty - - - -	24,461	7,800	15,000
	" from Bhaugulpoor to Sooree - - - -	10,700	6,500	4,200
	" from Hazareebagh to Burhee - - -	4,734	3,400	3,534
	" between Koilah Ghât and Ooloobariah - -	6,300	3,040	3,260
	" between Paunchkoorah and Koilah Ghât -	2,704	- -	2,024
	" from Bareepoor to Mutlah - - - -	8,899	7,821	1,078
	" from Jeagunge to Bogwangollah - - -	3,928	- -	3,928
	Hill road from Silligoree to Darjeeling - - - -	4,000	- -	3,000
	Patna branch road - - - - - - - - -	- -	- -	10,000
	Unmetalled road from Baraset to Jessore - - - -	14,749	5,000	9,749
	" from Cuttack to Toldonah - - -	- -	1,000	2,500
	Boat bridges over the Issamutty at Bongong - - -	3,600	- -	1,800
	Bridges on the road between Golaghat and Debrooghur (Upper Assam) - - - - - - - - -	10,000	657	4,269
	Ditto on the Burrakur River - - - - - - -	53,718	34,300	15,000
	Morhur and Boorya Bridges - - - - - - -	59,585	23,229	15,000
	Masonry causeway across the Soane - - - - -	9,048	11,300	3,000
Minor works, not enumerated - - - - - - - - - - -		- -	- -	22,287
		TOTAL - - - £.		198,503

List of the Principal Original Works—*continued.*

	NATURE OF WORKS.	Estimated Cost.	Expended up to 30 April 1861.	Sanctioned for 1861–62.
	NORTH-WESTERN PROVINCES.	£.	£.	£.
Military - -	Barrack accommodation at Goruckpoor* - - - - -	50,000	- -	12,500
	" at Bareilly - - - - - -	60,000	28,000	7,500
	" at Jhansi - - - - - -	70,000	23,880	5,616
	" at Cawnpore - - - - - -	90,000	42,000	3,000
	" at Shajehanpoor - - - -	35,000	22,500	2,000
	" at Gwalior - - - - - -	54,049	45,000	2,500
	Hospital at Nynee Tal - - - - - - -	2,027	- -	1,427
	Restoring the gaol at Bareilly to the state in which it was before occupation by military authorities - - - -	5,000	- -	2,500
	Altering the Lunatic Asylum at Bareilly to serve as Commissariat Godown - - - - - - - - -	3,407	- -	1,454
Judicial - -	Accommodation for new police in six divisions of the North Western Provinces - - - - - - -	20,710	- -	2,500
	Addition to central prison at Agra - - - - - -	6,794	- -	1,500
	New central prison at Meerut - - - - - - -	11,567	6,130	1,800
	" at Allahabad - - - - - -	12,000	2,900	1,800
	New gaol at Jhansi - - - - - - - - -	2,447	1,822	650
Revenue - -	Tuhseel buildings at sundry places - - - - - -	12,472	- -	5,000
	Patrol and assistant patrol's bungalows at Jhansi - -	2,430	- -	710
Ecclesiastical -	New church at Bareilly - - - - - - - -	3,400	1,700	1,700
	Roman Catholic churches at Cawnpoor and Meerut - -	2,188	- -	2,188
Educational -	Normal school at Meerut - - - - - - - -	2,000	- -	900
General - -	Civil offices at Allahabad - - - - - - - -	- -	- -	5,000
	Works in the new civil station at Allahabad - - - -	- -	5,000	1,200
	Political agency and kutcherry at Gwalior - - - - -	- -	2,000	1,000
	Memorial garden and monument at Cawnpoor - - -	- -	3,000	7,000
Agricultural -	Permanent works at head of Ganges Canal - - - -	- -	- -	10,000
	General works on main line " - - - -	1,334,407	1,445,000	5,000
	Rajbuhas on Ganges Canal - - - - - -	- -	- -	37,606
	Futtyghur branch of the Ganges Canal - - - -	156,869	- -	10,000
	Improvements of the Karoon Nuddee - - - - -	11,130	- -	1,000
	Jakhun Canal, Deyrah Dhoon - - - - - -	9,965	6,565	3,000
	Agra irrigation works - - - - - - - -	4,500	- -	3,000
	Bundlekund irrigation works - - - - - - -	- -	500	3,000
	Kylas Canal - - - - - - - - - -	8,248	3,748	2,000
Communications	Road between Cawnpoor and Bhowgong - - - -	13,119	- -	10,000
	" from Mozuffernuggur to Roorkee - - - -	9,447	650	5,000
	" from Roorkee to Deyrah - - - - - -	45,843	3,500	5,000
	Agra and Bombay road - - - - - - - -	117,235	38,925	25,000
	Jubbulpoor and Nagpoor road - - - - - - -	21,264	3,462	6,106
	Sohagee Pass road - - - - - - - - -	2,405	900	1,505
	Jubbulpoor and Mundla road - - - - - - -	- -	3,058	4,000
	Furruckabad road - - - - - - - - - -	3,300	- -	3,300
	Rohilkund feeding roads or tramways (road from Futtyghur *viâ* Bareilly and Moradabad to Nugeena) - - -	150,000	- -	20,000
	Road from Jubbulpoor to Kaylenjur - - - - -	4,385	2,056	2,329
	Myhere and Kaylenjur road - - - - - - -	- -	5,223	1,403
	Portion of the metalled road, which runs from the border of the Allahabad district to the city of Allahabad - -	5,139	- -	5,139
	Bridges over the Kharee and Ootungun rivers - - -	8,187	3,000	5,187
	" over the Saugor and Mhow road - - - -	5,472	1,830	3,342
	" over the Hindun river - - - - - -	2,697	- -	2,200
	Bridge on the Jubbulpoor and Nagpoor road - - -	3,500	- -	3,500
	Improvements of the River Ganges - - - - - -	- -	- -	2,000
Minor works not enumerated - - - - - - - - - - - -		- -	- -	43,222
		TOTAL - - -	£.	2,942,834
	PUNJAB.			
Military - -	Barrack accommodation at Kangra - - - - - -	7,003	- -	500
	" in palace enclosure, Delhi - -	- -	- -	10,000
	" at Peshawur - - - - -	4,384	2,100	1,684
	Hospital at Mooltan - - - - - - - - -	13,451	3,032	2,000
	Defences at Attock - - - - - - - - -	4,451	4,067	384
	Kohat Fort works - - - - - - - - -	40,596	30,170	500
Judicial - -	Police buildings at sundry places - - - - - -	17,635	7,939	3,405
	Central gaol, Lahore - - - - - - - - -	7,941	- -	1,500
		Carried forward - - -	£.	19,973

* Will not now be carried out.

LIST of the Principal Original Works—*continued.*

NATURE OF WORKS.		Estimated Cost.	Expended up to 30 April 1861.	Sanctioned for 1861-62.
		£.	£.	£.
	PUNJAB—*continued.*			
	Brought forward - - -	- -	- -	19,973
Ecclesiastical -	Sundry churches and additions to churches - - - - -	1,610	- -	1,610
	Umballah church - - - - - - - - -	2,364	2,000	364
Educational -	Normal school at Sunawar - - - - - - -	5,698	3,700	400
Industrial - -	Flour mills on the Baree Doab Canal - - - - - -	2,409	- -	2,409
	Madhoopoor workshops and Shahpoor watercourse - -	22,025	1,667	4,000
Agricultural -	Remodelling the Delhi branch of the Western Jumna canals	50,700	- -	15,000
	Ditto - upper section of - - ditto - - -	- -	- -	5,000
	Bund, irrigation, Delhi - - - - - - - -	5,000	- -	2,000
	Straightening and improving Bowana Escape on the Delhi Canal - - - - - - - - - - -	2,500	- -	1,500
	Construction of main line and branches, Baree Doab Canal -	1,350,949	1,013,069	28,990
	Ditto of Rajbuhas - - - - - - - -	174,500	13,886	20,000
	Improving and extending Kanwah (Sutlej) canals - -	10,871	9,808	963
Communications	Delhi and Muttra road - - - - - - - -	15,000	- -	7,500
	„ and Rewaree road - - - - - - - -	15,000	- -	8,500
	Bheema Pass road - - - - - - - - -	5,000	- -	2,000
	Umballah and Kalka road - - - - - - - -	7,000	- -	3,000
	Lahore and Peshawur road - - - - - - -	1,080,000	786,414	70,000
	„ and Ferozepoor road - - - - - - -	14,741	5,000	7,500
	Rawul Pindee and Murree road - - - - - -	4,200	600	1,000
	Abbottabad and Gurhi road - - - - - - -	14,766	9,860	705
	„ and Kala Serai road - - - - - -	227,012	14,808	
	„ and Murree road - - - - - - -	3,507	2,700	807
	Improvements to Dalhousie road - - - - - -	3,131	- -	2,000
	Bridging large rivers on the Grand Trunk road between Delhi and the Sutlej - - - - - - - -	- -	- -	10,000
	Famine works, chiefly communications - - - - -	- -	- -	17,500
Minor works not enumerated - - - - - - - - - - -		- -	- -	14,434
			TOTAL - - - £.	247,155
	OUDH.			
Military - -	Barrack accommodation at Lucknow - - - - - -	314,833	227,283	27,500
	„ „ at Fyzabad - - - - - -	106,728	66,461	10,000
	„ „ at Seetapoor - - - - -	106,411	66,256	7,500
	„ „ at Roy Bareilly - - - - -	106,306	56,315	5,000
	Roads in the cantonment of Dilkhoossha - - - - -	3,514	2,600	914
Judicial - -	Central and divisional gaols - - - - - - -	- -	5,000	20,000
Communications	Lucknow and Seetapoor road - - - - - - -	- -	- -	1,500
	„ and Fyzabad road - - - - - - -	- -	- -	5,700
	Fyzabad and Allahabad road - - - - - - -	37,399	9,421	20,500
	Byram ghât road - - - - - - - - - -	17,000	3,000	12,500
	Road from Roy Bareilly to Dalamhow - - - - -	- -	- -	5,000
	Road from Fyzabad to Gonda - - - - - -	- -	- -	4,000
	Boat bridge over the River Gogra at Merun ghât - -	2,130	- -	2,130
Minor works not enumerated - - - - - - - - - - - -		- -	- -	1,513
			TOTAL - - - £.	123,757
	NAGPOOR.			
Military - -	Family barracks at Kamptee - - - - - - -	7,500	- -	500
	Female hospital at „ - - - - - - - -	2,387	987	1,000
Judicial - -	Central gaol at Nagpoor - - - - - - - -	15,000	- -	5,000
	Court-houses at Kowta and Belaspoor - - - - -	1,400	- -	700
	„ at Chanda - - - - - - - -	3,205	- -	1,000
	„ at Bhundara - - - - - - - -	2,100	500	1,600
	Special Deputy Commissioner's court-house at Seetabuldee -	1,524	1,324	200
	23 Tuhseeldarees - - - - - - - - -	8,910	- -	2,500
Ecclesiastical - -	Church at Seetabuldee - - - - - - - -	1,008	500	503
			Carried forward - - - £.	13,008

LIST of the Principal Original Works—*continued.*

NATURE OF WORKS.		Estimated Cost.	Expended up to 30 April 1861.	Sanctioned for 1861–62.
	NAGPOOR—*continued.*	£.	£.	£.
	Brought forward - - -	- -	- -	13,008
Communications	Great Deccan road	- -	- -	10,250
	Southern road	- -	- -	3,150
	Eastern road	- -	- -	3,150
	District roads	- -	- -	2,000
	Allotment for roads	- -	- -	7,420
	Bridges on the Great Deccan road	- -	- -	6,250
	„ on the Southern „	- -	- -	3,150
	„ on the Eastern „	- -	- -	3,150
	Kanhan bridge at Kamptee	- -	- -	4,000
Minor works not enumerated		- -	- -	4,226
			TOTAL - - - £.	59,754
	PEGU.			
Military - -	Shingling barracks at Toungboo	8,958	- -	8,958
	„ „ at Rangoon	- -	- -	12,557
	Artillery barracks at „	- -	- -	2,583
	Gun-shed at Thayetmyo	- -	- -	2,176
	Tounghoo redoubt	12,822	8,334	4,488
	Ordnance godown in Tounghoo redoubt	6,620	1,930	1,000
	„ at Thayetmyo	1,780	1,480	300
	Magazine at Thayetmyo	2,651	2,551	100
	General store godown at Rangoon	6,181	4,000	2,181
	Commissariat godown in Tounghoo redoubt	6,606	1,930	1,000
	„ depôt at Thayetmyo	7,380	6,880	500
Judicial - -	Gaol buildings at Rangoon	3,445	2,000	1,445
Ecclesiastical -	Rangoon town church	4,500	- -	2,000
Municipal - -	Bassein market	3,047	1,000	2,047
Marine - -	Buildings in Dalla dockyard	10,930	- -	8,927
Minor works not enumerated		- -	- -	4,573
			TOTAL - - - £.	54,835
	TENASSERIM AND MARTABAN PROVINCES.			
Judicial - -	Tavoy gaol	5,000	- -	1,000
	Moulmein gaol, store and work yard	1,782	- -	350
	Court-house at Moulmein	5,059	1,700	1,500
	„ at Mergui	871	- -	500
	Block house at Kaloodoo	503	160	340
General - -	Master Attendant's office and store-room	953	500	453
Municipal - -	Sundry brick bridges at Moulmein	2,090	- -	2,090
Marine - -	Moulmein sea-wall	- -	- -	2,000
	Alguada lighthouse	46,435	- -	17,500
Communications	Amherst road	847	- -	1,247
	Toungwine roads	596	120	400
Minor works not enumerated		- -	- -	1,501
			TOTAL - - - £.	28,881
	STRAITS SETTLEMENTS.			
Military - -	European barracks at Tanglin	27,885	21,897	7,500
	Artillery „ at Fort Canning, Singapore	11,769	8,252	2,667
	Sepoy „ at Malacca	1,670	- -	1,000
	Native infantry hospital at Penang	863	753	110
Judicial - -	Police office, Inspectors' quarters, Coroner's office and additional lock-up at Singapore	2,458	1,516	942
	New court-house at Singapore	1,686	- -	1,686
	Convict lines, &c., Penang	720	74	646
Ecclesiastical -	St. Andrew's Church at Singapore	4,792	4,792	660
General - -	General hospital at Singapore	584	440	144
	Buildings for sawmill, coal-shed, and screw tuckle	957	- -	957
Marine - -	Cape Rachado lighthouse	2,469	1,100	1,369
Agricultural -	Clearing Balestier-road canal, Singapore	970	- -	321
Communications	Roads in Penang	1,083	226	626
	Bridges in Malacca	1,211	546	666
	„ in Singapore	748	352	396
Minor works not enumerated		- -	- -	1,326
			TOTAL - - - £.	21,016

List of the Principal Original Works—*continued.*

NATURE OF WORKS.		Estimated Cost.	Expended up to 30 April 1861.	Sanctioned for 1861–62.
	Hyderabad (British).	£.	£.	£.
Military	Barrack accommodation at Trimulgherry	74,840	11,000	19,200
Communications	Metalled road between Toka and Aurungabad	18,410	- -	5,000
Minor works not enumerated		- -	- -	200
		Total - - - £.		24,400
	Coorg.			
Communications	Road from Veerajunderpet to Betungala	280	200	80
	Road from Soontacoopum to Coodlypett	2,000	1,000	1,000
		Total - - - £.		1,080
	Hyderabad Assigned Districts.			
Military	Berar cantonment roads	634	- -	200
Judicial	Penitentiaries in East and West Berar	7,200	600	500
Revenue	Deputy Commissioner's Kutcherry at Aukola	3,595	2,200	1,200
Communications	Nagpore dawk-line between Savergaum and Wurda rivers	46,023	1,600	1,000
Minor works not enumerated		- -	- -	1,740
		Total - - - £.		4,640
	Mysore.			
Judicial	Divisional gaol and hospital at Seemogah	6,950	- -	2,500
	Additions to the gaol at Mysore	650	- -	650
Revenue	Four talook kutcherries	2,659	- -	1,500
Municipal	Four public privies on the bank of the nullah running through the Bangalore cantonment bazaar	740	- -	740
	Three slaughterhouses in the Bangalore cantonment	709	- -	709
	Drainage of Bangalore cantonment	7,400	5,000	2,400
Agricultural	Dam across the Yagachy river	590	100	490
	Two dams across the Goondul river	1,170	- -	400
	Excavating Hirebully channel	600	- -	450
	Reconstructing three bunds	1,508	- -	950
	„ four tanks	2,199	- -	1,224
	Dismantling old palace at Seringapatam, and constructing a sandal store	550	- -	550
Communications	Mysore, Manantoddy road	6,000	- -	2,000
	„ Cannanore road	2,110	- -	1,000
	Road from Theerthully to Anantapoor	1,541	- -	400
	„ from Seemogah and Benkipoor to Doommee	1,680	- -	500
	„ from Chittledroog to Doommee	1,680	- -	500
	„ from Seerah to Mudgherry	1,380	- -	1,000
	Toomcoor unmetalled road	842	- -	842
	Mysore „ „	562	- -	562
	Sundry unmetalled roads	4,097	- -	4,097
	Bridges across the Yettena and Wurda rivers	858	- -	700
	„ and drains on the Arseekarray and Chenroypatam road	1,073	- -	573
	Accommodation for travellers	1,170	- -	808
Minor works not enumerated		- -	- -	501
		Total - - - £.		26,046

Chap. VIII.
Public Works.

The following is a Table of the Receipt and Disposal of the several Budgets of 1861–62 :—

Names of Administrations.	Budgets of 1861–62. Received.	Orders passed.	Supplementary Orders issued.	Amount allowed.
				Lakhs.
Madras - - - - - -	11 Feb. 1861	- -	5 July 1861	66
Bombay - - - - - -	27 Feb. „	- -	29 Aug. „	52½
Bengal - - - - - - -	7 Feb. „	- -	9 Aug. „	51
North Western Provinces - -	22 April „	- -	5 July „	63
Punjab - - - - - - -	8 Jan. „	- -	27 Aug. „	54
Oude - - - - - - -	15 Feb. „	27 April 1861	- -	19
Nagpore - - - - - -	28 Feb. „		13 June 1861	8½
Pegu - - - - - - -	8 Jan. „	- -	1 July „	10½
Tenasserim and Martaban Provinces	8 April „	- -	10 Aug. „	4
Straits Settlements - - - -	5 Feb. „	- -	19 July „	4
Hyderabad - - - - -	30 Jan. „	- -	16 Aug. „	5½
Coorg - - - - - - -	28 Feb. „	- -	- -	¼
Mysore - - - - - - -	1 Mar. „	6 May 1861	- -	10

The actual outlay incurred and the progress made during the year will be found embodied in detail in the Progress Report annually issued from this Department.

The following is a Comparative Statement showing the Authorised Expenditure for the last Four Years on Public Works:—

	1858–59.	1859–60.	1860–61.	1861–62.	Increase or Decrease in 1861–62, compared with the previous Year.
Madras.	£.	£.	£.	£.	*Per cent.*
Military - - - -	65,685	99,240	66,931	40,794	39·05 Decrease.
Civil - - - -	21,280	28,135	23,036	13,261	42·43 „
Agricultural - - -	28,064	29,847	39,973	33,848	15·32 „
Communications - -	38,173	43,503	61,726	82,043	32·91 Increase.
Miscellaneous - - -	1,202	1,940	2,680	5,948	121·94 „
Total - - - £.	154,404	202,665	194,346	175,894	9·49 Decrease.
Bombay.					
Military - - - -	138,245	123,214	108,229	50,842	53·02 Decrease.
Civil - - - -	9,948	21,488	18,015	13,548	24·79 „
Agricultural - - -	5,586	11,596	21,036	22,388	6·42 Increase.
Communications - -	44,912	31,699	32,317	54,530	68·73 „
Miscellaneous - - -	7,385	20,973	23,654	40,720	72·15 „
Total - - - £.	206,076	208,970	203,251	182,028	10·44 Decrease.
Bengal.					
Military - - - -	186,240	105,263	56,147	47,500	15·40 Decrease.
Civil - - - -	13,036	36,199	59,022	39,656	32·81 „
Agricultural - - -	5,612	4,420	4,712	10,184	116·13 Increase.
Communications - -	23,714	35,904	53,892	96,412	78·89 „
Miscellaneous - - -	4,751	1,640	4,732	1,000	78·86 Decrease.
Total - - - £.	233,353	183,426	178,505	194,752	9·10 Increase.
North Western Provinces.					
Military - - - -	264,108	241,187	133,990	57,199	57·31 Decrease.
Civil - - - -	41,262	19,238	39,275	42,668	8·63 Increase.
Agricultural - - -	38,622	58,055	55,941	89,103	59·28 „
Communications - -	46,795	16,931	35,009	125,495	258·46 „
Miscellaneous - - -	- -	593	1,609	2,368	47·15 „
Total - - - £.	390,787	336,004	265,824	316,833	19·18 Increase.

CHAP. VIII.
Public Works.

Comparative Statement showing the Expenditure for the last Four Years on Public Works—*contd*.

	1858–59.	1859–60.	1860–61.	1861–62.	Increase or Decrease in 1861–62, compared with the previous Year.
PUNJAB.	£.	£.	£.	£.	*Per Cent.*
Military - - - -	99,126	93,024	74,992	19,784	73·62 Decrease.
Civil - - - -	11,487	8,209	21,293	11,922	44·00 „
Agricultural - - -	Returns incomplete.	61,944	67,106	74,053	10·35 Increase.
Communications - -	38,146	36,940	63,927	114,586	79·24 „
Miscellaneous - - -	2,771	1,504	700	6,809	872·71 „
TOTAL - - - £.	151,530	201,621	228,018	227,154	0·37 Decrease.
OUDE.					
Military - - - -	159,642	285,355	156,637	51,652	67·02 Decrease.
Civil - - - -	6,309	2,941	11, 91	20,372	71·00 Increase.
Agricultural - - -	—	—	—	—	—
Communications - -	32,166	10,309	8,268	51,733	525·70 Increase.
Miscellaneous - - -	97	38	1,970	—	—
TOTAL - - - £.	198,214	298,643	178,788	123,757	30·77 Decrease.
NAGPORE.					
Military - - - -	6,388	11,556	9,447	4,291	54·56 Decrease.
Civil - - - -	1,112	1,821	4,933	12,943	162·37 Increase.
Agricultural - - -	- -	- -	80	—	—
Communications - -	- -	2,301	3,508	42,520	1112·08 Increase.
Miscellaneous - - -	- -	605	70	—	—
TOTAL - - - £.	7,500	16,283	18,038	59,754	231·26 Increase.
PEGU.					
Military - - - -	20,825	56,342	31,764	20,487	35·50 Decrease.
Civil - - - -	5,766	13,886	6,700	7,444	11·10 Increase.
Agricultural - - -	- -	- -	40	—	—
Communications - -	- -	1,671	26	6,010	23016· Increase.
Miscellaneous - - -	7,967	5,757	6,251	8,047	28·73 „
TOTAL - - - £.	34,558	77,656	44,781	41,988	6·24 Decrease.
TENASSERIM AND MARTABAN PROVINCES.					
Military - - - -	1,276	3,531	3,978	210	94·72 Decrease.
Civil - - - -	389	2,343	4,652	5,027	8·06 Increase.
Agricultural - - -	—	—	—	—	—
Communications - -	- -	269	295	1,678	468·81 Increase.
Miscellaneous - - -	1,468	889	16	4,464	27800· „
TOTAL - - - £.	3,133	7,032	8,941	11,379	27·27 Increase.
STRAITS SETTLEMENTS.					
Military - - - -	8,149	19,846	40,641	8,776	78·40 Decrease.
Civil - - - -	7,407	8,156	17,668	5,036	71·44 „
Agricultural - - -	31	150	263	453	72·24 Increase.
Communications - -	5	505	4,015	2,729	32·03 Decrease.
Miscellaneous - - -	- -	17	2,529	1,521	39·86 „
TOTAL - - - £.	15,592	28,674	65,116	18,515	71·56 Decrease.
HYDERABAD (British).					
Military - - - -	16,785	19,814	52,873	19,200	63·69 Decrease.
Civil - - - -	70	754	772	—	—
Agricultural - - -	—	—	—	—	—
Communications - -	140	3,996	510	5,200	919·61 Increase.
Miscellaneous - - -	—	—	—	—	—
TOTAL - - - £.	16,995	24,564	54,155	24,400	54·94 Decrease.

Comparative Statement showing the Expenditure for the last Four Years on Public Works—*cont*d.

———	1858-59.	1859-60.	1860-61.	1861-62.	Increase or Decrease in 1861-62, compared with the previous Year.
COORG.	£.	£.	£.	£.	*Per Cent.*
Military	Included in Mysore.	—	—	—	—
Civil		- -	47	—	—
Agricultural		—	—	—	—
Communications		458	504	1,080	114·28 Increase.
Miscellaneous		—	—	—	—
TOTAL - - - £.	- -	458	551	1,080	96·00 Increase.
Alguada Lighthouse	- -	- -	20,000	15,000	25·00 Decrease.
TOTAL (British) - - £.	1,412,143	1,585,998	1,460,317	1,392,534	—
HYDERABAD (Assigned Districts).					
Military	632	448	504	875	73·61 Increase.
Civil	9,254	14,727	10,964	2,230	79·66 Decrease.
Agricultural	1,576	2,558	876	100	88·58 "
Communications	7,907	5,419	8,747	1,435	83·59 "
Miscellaneous	208	10	481	—	—
TOTAL - - - £.	19,577	23,162	21,572	4,640	78·49 Decrease.
MYSORE.					
Military	- -	250	107	—	—
Civil	1,998	1,783	3,701	4,928	33·15 Increase.
Agricultural	1,512	1,342	2,013	4,234	110·33 "
Communications	12,356	4,221	3,492	13,034	273·25 "
Miscellaneous	1	10	4,438	3,849	13·27 Decrease.
TOTAL - - - £.	15,867	7,606	13,751	26,045	89·40 Increase.
GRAND TOTAL - - - £.	1,447,587	1,616,766	1,495,640	1,423,219	—

BUDGET RULES.

In the Extract of Proceedings of the Government of India which accompanied the orders on the Budget of 1861-62, it was intimated that a complete set of Budget Rules would be issued. These rules, together with the budget forms as approved by the Governor General in Council, will be found in the Appendix. They were issued to the several subordinate governments and departments in July 1861, and have been followed in the preparation of the Budgets for 1862-63.

Appendix (A).

DEPARTMENT OF PUBLIC WORKS ACCOUNTS.

At page 3 of the last Report the material points in connexion with the formation of a Department for Public Works Accounts in India were fully explained; the principles of the arrangement as they had been finally settled were set forth; and the appointment of an Inspector of Public Works Accounts, who would be the Financial Officer of the Public Works Department of the Supreme Government, was announced. This officer commenced his first tour in the month of January last, but the important results of his inspections do not come within the period embraced in the present Report. The instructions which were given to the Inspector General of Accounts, and which form Appendix B, will show the nature and scope of the duties he was expected to undertake in the course of his tour of inspection.

STATE OF THE ACCOUNTS.

The Department of Accounts under the new arrangement has worked in a satisfactory manner. On the next page is an Abstract Statement of the progress made up to the 30th April 1862, in adjusting and booking the accounts of Executive Engineers in the Controllers' Offices:—

ABSTRACT of the Progress made up to 30 April 1862, in Adjusting and Booking the Accounts of the Executive Engineers in the Controllers' Offices.

Governments.	Number of Divisions.	ARREARS.											
		Complete Accounts Received.		Rough Abstracts Prepared.		Copies of Abstracts sent to Executive Engineer.		Abstracts Passed.		Accounts Booked.		General Average.	
		Months Arrears.	Average.	Months Arrears.	Average.	Months Arrears.	Average.	Months Arrears.	Average.	Months Arrears.	Average.	Present.	Loss or Gain.
Nagpoor - - -	–	–	–	–	–	- No arrears -		–	–	–	–	–	G. *0·98*
Punjab - - - -	23	2·0	0·08	5·5	0·24	5·5	0·24	20·0	0·87	29·0	1·26	*0·53*	G. *0·07*
North-Western Provinces	40	18·0	0·45	16·0	0·40	37·0	0·92	17·0	0·42	21·0	0·52	*0·54*	G. *0·08*
Pegu, Tenasserim and Martaban Provinces.	9	nil.	–	nil.	–	–1·5	–0·16	nil.	–	4·0	0·43	*0·54*	G. *1·35*
Bengal - - -	37	28·0	0·75	30·5	0·82	34·5	0·93	47·0	1·27	47·0	1·27	*1·00*	L. *0·07*
Oudh - - - -	8	8·0	1·00	2·0	0·25	113·0	14·12	97·0	12·12	126·0	15·75	*8·65*	L. *3·02*

The rate of progress attained in several offices, especially in that of the Punjab, shows that the time has now come for reducing the quantity of arrears allowed in each stage of the accounts. Therefore, in calculating arrears, one month will be allowed for the submission of the accounts to the central office, half a month for preparing the rough abstract and despatching a copy to the executive engineer, and half a month for auditing and booking; or a total of two months (instead of two and a half months, as before) for passing the accounts through all the stages.

In making this reduction of arrears allowed, the difficulty under which the Bengal and British Burmah offices labour, by reason of the long distances which separate the out-stations from them, should not be forgotten.

By "accounts booked" is understood that the items of an abstract have been posted into both the journal and ledger.

SELECTION OF MILITARY WORKS FOR THE BUDGET.

The assignment for Public Works being now absolutely limited every year by the Budget, it is obvious that all Departments must furnish the Local Governments with a detailed view of the requirements in good time to admit of their consideration before drawing up that document.

As there had been no such systematic review of military requirements, it was ordered that lists of the military works considered necessary at each station should be prepared by local committees, and submitted through the Quartermaster General's Department for the information of the Commander in Chief, and that his Excellency should select what he approved, and forward a list of them to the Public Works Departments of the several Local Governments for embodiment, so far as a fair consideration of all demands admitted, in the Budget.

RULES FOR CONTROLLERS AND EXAMINERS OF PUBLIC WORKS ACCOUNTS.

In August last a set of rules, in supercession of the audit rules prescribed in the code, was framed for the guidance of Controllers and Examiners of Public Works Accounts, and these are now in operation.

DEPARTMENTAL MANAGEMENT AND DETAILS.

PRINCIPLE OF PROMOTION.

In dealing with the promotions of the departmental officers of public works in the Provinces of Bengal, North Western Provinces and the Punjab, the Governor General took the opportunity to make some general remarks on the principles which should regulate promotions. There appeared to his Excellency to be often a tendency to hurry promotion in the cases of certain officers whose services are valued by the Local Governments. Doubtless that value rightly attached to those services, but it should not be forgotten that if all the promotion that the Government can bestow is compressed into a few years, there will remain no further means of advancement. A long period of stagnation, and in some cases perhaps of discontent, must follow the premature exhaustion of reward. This consideration should not altogether be overlooked even in dispensing promotion to the most deserving.

Chap. VIII.
Public Works.

Transfer of Patronage of the Public Works Department Staff to Local Governments.

On the 1st June 1861, all promotions and appointments in the Engineers' and other establishments of the Public Works Department, with certain exceptions, were transferred to the Local Governments. The Lieutenant Governors were empowered to make such promotions and appointments without the intervention of the Government of India, further than it may deem advisable in the exercise of its general power of control and supervision.

The change, however, was not extended in regard to officers and upper subordinates serving in the Public Works Department of the minor administrations.

Punishment by Pecuniary Fines.

In view of the transfer of a more direct control of the *personnel* of the Department to the Local Governments, the Governor General in Council considered it desirable to lay down his views on the subject of inflicting pecuniary fines. His Excellency, whilst not universally disallowing this mode of punishment, was of opinion that it should be rarely resorted to. The duties of the officers of this Department are essentially mixed up with pecuniary affairs; diligence and judgment, or the want of these qualities, will cause an advantage or a loss to Government, which in their case is directly measureable in a sum of money; and hence, at first sight, the exaction of a fine may appear to be the natural and obvious punishment of an officer whose deficiencies have caused a measureable loss, whilst no doubt the law would recognise the penalty. But the want of diligence and judgment in the conduct of their duties by officers of other Departments may cause loss, possibly much greater and more serious to Government, yet the exaction of a direct money penalty in such cases would at once be recognised as inappropriate and inadmissible. The infliction, therefore, of such penalties in ordinary cases of loss, caused by defect of diligence or judgment, is scarcely equitable, and is certainly not expedient. It is calculated to disgust the officer, and is too apt to appear to him and his comrades as if Government cared nothing for his conduct and reputation, but only for the recovery of the sum of money. It is doubtful whether such a penalty is conducive to reform. It is certain that the harshness attributed to the Military Board (whether justly or unjustly) did produce in the Department something very different from reform, the evils of which it has been very difficult to eradicate.

In accordance with the above views, it has been ruled that pecuniary penalties shall be exacted only in such cases as would be similarly punished in other Departments (such as actual deficiencies of cash arising from gross neglect, and apart of course from instances of fraud), or when loss to Government, arising in other ways from negligence of the same individual, has been repeated, and when there may be special reasons for not inflicting the more appropriate punishments of reduction of rank or removal from the Department.

Moving of European Subordinates during the Hot Months.

His Excellency the Commander in Chief having drawn the attention of Government to the death of a Probationary Assistant Overseer in this Department (who was a private in the 92d Highlanders), which appeared to have been caused by exposure to great heat while in progress on duty from Jhansi to Moradabad, a circular was issued, directing that, excepting in extraordinary cases of actual emergency, care should be taken to avoid as much as possible moving European subordinates during the hot months, especially in those districts where accommodation for these men and their families when travelling is not available.

Rise in the Rates of Labour and Materials.

The frequency with which revised estimates were submitted, considerably in excess over the original sanctioned estimates, on the alleged ground of the rise in the rates of labour and materials, induced the Government of India to issue a circular on the subject in October last. It was not doubted that the price of labour and materials has of late years risen, but the Governor General in Council was not satisfied that the fact was not unfrequently urged beyond its legitimate consequences. A general inquiry was directed, which should extend over the last 10 years from 1852 to 1861 inclusive, and embrace each public works division. In each year, the ordinary wages of carpenters, smiths, bricklayers, thatchers, and adult male coolies, were required to be stated, as well as the current rate of hire of a 2-bullock hackery, with the corresponding ordinary rates of the several descriptions of work prevailing each year. It was directed that the statements so furnished should be carefully examined by superintending engineers, who should record their opinions of the current rates. The inquiry being one of much consequence, the local governments and administrations were enjoined to see it promptly and effectually carried out.

Extension of the Duties and Powers of Superintending Engineers.

In consequence of the union of the duties of Chief Engineer and Secretary in the Public Works Department, which took place in January 1860, it has been necessary to extend the powers of superintending engineers, so as to distribute more equally the business of the Department between them and the Chief Engineer, and thus afford the latter more leisure than he now has for general administration business.

Chap. VIII.
Public Works.

INTRODUCTION OF THE CONTRACT SYSTEM IN THE DEPARTMENT OF PUBLIC WORKS.

When the Government of India had recently under consideration the high per-centage of establishment charges in several provinces on the expenditure on works, one of the causes prominently noticed as tending to enhance the comparative cost of establishments, was the comparative rarity of work by contract. The matter was discussed in the letter of instructions addressed to Major Chesney on his departure on a tour of inspection, which forms Appendix B to this Report. The views there expressed were embodied in a circular which has since been addressed to the local governments and administrations.

MILITARY.

HARBOUR DEFENCES FOR BOMBAY.

Projects for portions of these works having been submitted, the Government of India authorized the prosecution of the following:—

I. Foundation for the Battery on Middle Ground.
II. Raising Oyster Rock to the level proper for a tier of guns.
III. Cross Island Battery.

The material obtained by levelling Cross Island is required for raising the surface of Oyster Rock; so that the prosecution of the second work, which, with the first, is much desired, involves similar progress of the third work. A sum of five lacs of rupees, in addition to the usual Public Works Budget allotment, was made specially available for these works, but with the proviso that progress shall be confined within limits not prejudicial to any decision which may hereafter be come to as to the exact character of the defences.

DEFENSIVE WORKS IN ASSAM.

In the month of February last the Government of India approved the immediate construction of the following works to guard against the hostile incursions of the Abors in Assam:—

1. A masonry guard-house in Pobah Mookh.
2. An outpost at Lalleekopal.
3. Clearance of the road between Pobah Mookh and Deemoh.

OUTPOST AT BUNNOO.

In July 1861, the Lieutenant Governor of the Pubjab reported that he had, on the recommendation of Brigadier General Chamberlain, sanctioned an estimate, amounting to 10,014 rupees, for constructing an outpost at Bunnoo.

ARSENAL AT FEROZEPOOR.

The original design for this work comprised—for the defences, an enclosure wall with banquette for musketry, and ramparts at the bastions, with a glacis all round; for accommodation, barracks for two companies, and suitable quarters for officers and for ordnance staff. The amount of the estimates was 5,15,554 rupees.

A reduced scheme subsequently submitted proposed to substitute a fieldwork profile all round, and to provide cover for the garrison by bringing into use some of the iron skeleton frames still remaining in store at Ferozepoor.

This scheme was calculated to cost only 60,000 rupees, and was sanctioned, subject to its meeting the approval of the Commander in Chief.

QUARTERS FOR MARRIED SOLDIERS.

The Military Finance Department had occasiom to remark on the very great expense that the completion of the family quarters for the increased force of European troops all over India would involve, and suggested that the difficulty might in great measure be overcome by, the adoption of what is known in the Madras Presidency as the Patcherry system.

There was, however, no sufficient information before this Department as to the Patcherry system, which is peculiar to Madras and Bombay; and it was otherwise desirable that more precise reports should be obtained as to the manner of accommodating married soldiers in different places in India. Further, to form a proper judgment as to the probable outlay to be incurred under any system, it was necessary that precise information should be obtained as to the number of married soldiers still to be provided with quarters, looking both to the existing number of quarters and to the allowed maximum. Inquiry was accordingly made for information on the points noticed.

From the replies received it appears highly improbable that the patcherry, or separate house system can ever be accepted, and the provision of barracks seems necessary. If the provision of barracks for the married soldier be determined on, the main points for consideration will be—first, what shall be the nature of the accommodation; second, what is the actual number of the soldiers to be provided for; third, with what degree of rapidity, and in what order as to time and place, shall the necessary work be carried out.

The replies to these questions depend, however, on the military aspect of the case, and the matter was referred to the Military Department for a determination of the fundamental *principles* to be followed, and the actual *facts* to be dealt with under those principles; after which the Public Works Department would be in a position to deal with it practically.

Half-yearly White-washing of Barracks and Hospitals.

On the recommendation of the Principal Inspector General, Medical Department, a general order was issued for the interior of every barrack and hospital to be whitewashed throughout twice a year, in addition to any partial whitewashings which for particular reasons may be necessary. Dr. Forsyth is of opinion that the best time for this will be the months of November and May, or December and June respectively; and that white-washing with perfectly new fresh lime immediately before the setting in of the rains is an important sanatory measure.

Punkahs in Soldiers' Barracks.

Reference was made in the last Report to the very serious expense to the State on account of punkah-pulling in soldiers' barracks. Since that Report two schemes have been before Government for superseding coolie-labour by mechanical appliances. One of these was submitted by Mr. P. Orr, who proposed to introduce a system of moving punkahs by water-power, and working it by contract. The preliminaries were arranged for giving the project a fair trial, but Mr. Orr failed to commence with the work within the stipulated period.

Another and more promising scheme has been devised by Mr. Grant, a supervisor of the Department of Public Works at Benares. It consists of the double contrivance of a punkah-pulling machine and a tattie-watering apparatus. Mr. Grant's invention has received the approval of his Excellency the Commander in Chief, and is now being subjected to the test of actual experiment at Benares, Meerut, Agra, and Gwalior, as well as three of the largest military stations in the Punjab.

Dr. Clarke's Ventilating Apparatus.

The ventilation of solitary cells by artificial means has been experimentally carried out in the Agra prison, and has proved eminently successful. The apparatus "throws a current of air into each cell along the whole length of the corridor, equal to about the blast required for an ordinary blacksmith's forge, a quantity quite sufficient for the ventilation of a cell 7′ × 10′ in area." The Government, North-Western Provinces, has been requested to arrange for having the apparatus tried in military prison cells, or in a small hospital.

Iron Cots.

The question of providing iron cots for European troops has been under consideration. The objections to wooden cots are their harbouring bugs, and being comparatively more liable to injury. The objections to iron cots seems to be the expense of prime cost, and as hitherto constructed, their legs breaking up ordinary Indian flooring. The subject was referred to the Military Finance Commission, and the following are the questions which were put to them, with their answers:—

Questions.	*Answers.*
I. Should iron cots be universally used for European soldiers?	Yes.
II. If universally used, how are they to be introduced; gradually, or by an immediate order?	Gradually, as the wooden ones now in use become unserviceable.
III. From what source are they to be supplied; from England; from any one source in India; or from various local sources?	From Indian establishments, such as the Cossipoor Gun Foundry.
IV. Is there at present existing a pattern of an iron cot that the Commission can in all respects recommend; and if not, what modifications of any existing pattern are desirable?	Yes, there are several suitable patterns, but which is the most so should be decided by a competent authority; such a decision only is requisite.

Gas Light for Barracks.

His Excellency the Commander in Chief urged upon Government the desirableness of gas illumination in barracks generally, and those of Fort William and Hazareebag in particular. The Government of India is prepared to afford all reasonable encouragement to contractors and others for carrying out gas-works in European barracks, and wishes this to be made known. In Hazareebag, where the barracks are built of combustible materials, the introduction of gas would be obviously objectionable, but a contract has been entered into with the Oriental Gas Company for lighting the barracks in Fort William with gas, and the necessary works have for some time been in progress. Provision will be made in the arrangements, as far as possible, for carrying off heated air from the burners, as well as for preventing the air in the room being unduly heated by the gas.

Standard Data and Bench Marks.

During the recent visits of the Special (Cholera) Commission to various military stations in the Punjab and North-Western Provinces, it was frequently found very difficult to form a correct opinion as to the merits of existing works for drainage or water supply, on account of the absence of complete and systematic sets of levels for each station. This was brought to notice by the President of the Special Commission: as also the want of permanent "bench marks," both on the ground and in the detailed maps of the stations. The necessary orders have been issued to the proper officers to ensure in future, as far as possible, a more uniform and connected system of levels and bench marks, so as to admit of their eventual reduction to one standard datum for the whole country.

NAVAL AND MARINE.

Lighthouse on the Island of Perim.

The Government of Bombay sanctioned an expenditure of 12,144 rupees for a light on the Island of Perim, which was completed and forwarded to Aden in December 1860.

It is a revolving light, and may be seen at a distance of 17 to 22 miles; it is considered of great utility to ships entering or leaving the Red Sea.

The Alguada Reef Lighthouse.

Steady progress has been made with these works. The question as to the kind of light best adapted for the Alguada Reef has been definitively decided. The Coco Island being further from the Coast of Pegu, and more elevated than the Alguada Reef, and reference being had to the relative importance of the lights as affecting navigation in these localities, opinion was divided as to whether the same powerful revolving light should be given to the Alguada Reef, and the fixed light to the Coco Island, or the reverse. On a full consideration of this point, it has been finally determined that the Alguada Reef being the greater danger, ought to have the better light. Accordingly the Alguada Lighthouse will have the revolving light, and that on the Coco Island will be a fixed light.

Lighthouse on Coco Island.

A preparatory survey has been in progress, but no further steps have been taken in this matter.

Lighthouse on Double Island.

Designs and estimate for this lighthouse have been submitted by Captain Fraser, at an estimated cost of 1,37,298 rupees, but they have been returned to be modified, as it is considered that all the objects in view might be attained by a cheaper description of structures. Meantime the work is in progress.

Lighthouse on the Basses.

It has been reported that a light vessel, under construction at Bombay, would be ready for these reefs in the month of September, and that the light might be lit on the 15th October, if due notification thereof were given.

Wet Docks for Calcutta.

In October 1859, the Government of Bengal submitted a proposition from the Chamber of Commerce for the construction of wet docks for the Port of Calcutta. Those interested in the scheme considered that a guarantee of interest by the Government on the capital to be employed was essential to enable the money to be raised, and the Government having decisively declared its inability to give any guarantee, the Chamber of Commerce replied that they must abandon the further consideration of the project.

ECCLESIASTICAL.

Memorial Church at Cawnpoor.

In the last official Report was noticed the intention of erecting a Memorial Church at Cawnpoor, in the immediate vicinity of Sir Hugh Wheeler's entrenchment.

Five designs were submitted, and the preference was given to that by Mr. Walter Granville, in the Lombardic style, not only on account of its great merit, but because it is believed it can be built for the available amount. The accommodation is for 600 persons.

The private subscriptions were as follow:—

Indian

	Rs.	a.	p.
Indian Contributions.			
Proceeds of sale of 5½ per cent. Government Paper to the amount of *Rs.* 37,000, sold at *Rs.* 4–4 premium - -	39,612	3	9
Balance of uninvested subscriptions with interest credited by the Oriental Bank - - - - - -	1,247	5	5
English Contributions.			
Equivalent 1,911 *l.* 14 *s.* 5 *d.* paid into the India Office by the Society for the Propagation of the Gospel - -	19,117	3	4
Total - -	59,976	12	6

This the Government determined to increase, by a public grant, to *Rs.* 1,20,000.

Church in the Civil Station of Lucknow.

This church was first proposed in 1858 by Sir R. Montgomery, then Chief Commissioner. A plan was drawn out by Major G. Hutchinson, and roughly estimated by him at 30,000 rupees, but the building has, in fact, cost nearly 60,000 rupees, which amount has been provided from the city fines. The building is considered very creditable by competent authorities as to its finish and architecture.

St. James's Church.

The old church in the district of St. James was built in 1823, at a cost of 36,342 rupees. It fell down in 1858.

In February 1859, it was suggested by the chaplain of St. James's, that it would be much better to construct the new church on some other site. This removal was supported on the ground that the terminal stations of the Eastern Bengal and South-Eastern Railways at Sealdah, would probably lead to a considerable increase of the European population in the immediate neighbourhood, and make a church very desirable in that quarter; and further, with reference to the fact that a new church, if built on the plan of the old one, which had only 438 sittings, would not provide for such an increase of population, and that a larger church could not be built on the old foundations.

A piece of land was therefore purchased, at a cost of 61,145 rupees, and having an area of beegahs 15-12-13. The site on which the old church stood was sold for 20,800 rupees, which went in part payment for the new site, reducing the outlay to 40,345 rupees.

Of the 15 beegahs of land thus taken up, about six beegahs were proposed to be appropriated for the church and grounds, and a further portion for the school-houses which it was proposed to re-establish in connexion with this church. It was proposed also that a parsonage might be built on the ground without any expense, as the saving of the chaplain's house-rent will repay the cost of building. The remaining portion of the land, it was suggested, might be left open for the health and beauty of the neighbourhood, or held in hand for any future purpose, as the value of the land in that quarter is rising.

With a view to erecting as handsome a building as was possible, a design was procured from Mr. Gilbert Scott, an eminent English architect. The style was Italian Gothic. The area covered by the building, including the tower, would have been about 15,000 superficial feet; the area of St. Paul's Cathedral, Calcutta, being about 16,000 superficial feet. The Lieutenant Governor greatly approved of Mr. Scott's drawings, "both in respect to the beauty of the design, as well as the manner in which the details of construction are adapted to the various requirements and exigencies of the climate." The church, according to Mr. Scott's design, complete in all its parts and dependencies, was estimated to cost 3,40,000 rupees.

The design was warmly recommended by the Lieutenant Governor, but notwithstanding its acknowledged merits, it was considered to be beyond the limits of any grant the Government could sanction, and two lakhs was fixed as the largest amount that ought to be spent on this church.

A revised design has since been submitted, prepared by Mr. Wray, c. e., an officer in the Public Works Department, and approved. The style adopted is the "Continental Gothic" of the 13th century. The edifice will be of plain brick, carefully built, "pointed" on the outside, and plastered within. The towers will be of wood, and in common with the roof, will be covered with lead where exposed to rain. The pavement will be of stone on brick vaulting. The verandahs will be cut off from the body of the church below, but above it will be thrown into it with a clere-story, and be occupied as galleries.

The details of the estimate are as follow:—

	Rs.
Body of church - - - - - - - - -	1,56,300
Fittings for essential use - - - - - - - -	13,650
Enclosure, railing and lodges - - - - - -	11,662
Drainage and roadways - - - - - - -	3,623
Gas-fittings, lightning conductors, and decoration works -	14,765
Total - -	2,00,000

The building will provide sittings for 1,048 persons, including 326 sittings in the galleries.

JUDICIAL.

Central Gaols.

After some delay, a decision having been come to in the Home Department that central gaols should be generally adopted, orders were issued in this Department on several proposals for the construction of such gaols at various places.

Allahabad.—The commencement of this gaol was authorised by his Excellency the Governor General in 1858, and the estimated expenditure up to 30th April, was 45,000 rupees. The estimate, submitted for sanction, amounted to 2,73,016 rupees, to which was to be added value of prison labour to the extent of 90,327 rupees, or 3,63,343 rupees in all.

The provision of solitary cells was considered to be in excess of what could possibly be required, and the charge on this account was ordered to be reduced from 63,546 rupees to 9,920 rupees, besides a large saving in prison labour, &c.

Meerut.—This gaol is designed to accommodate 2,200 prisoners. It is estimated that 79,296 rupees has been spent up to 30th April. The estimate amounts to 1,15,950 rupees cash, and 35,608 rupees in prison labour, or 1,51,558 rupees in all.

Here, too, the number of solitary cells was ordered to be reduced, leading to a reduction in the estimate of 7,427 rupees.

Bareilly.—This gaol was partially destroyed in the mutiny before it had been completed. It is now proposed to complete it for 3,000 prisoners, and to build a house for the superintendent. The estimated cost of the gaol is 1,64,455 rupees cash, prison labour, 94,745 rupees; total, 2,59,200 rupees.

The comparative cost per head of the prisoners in the three estimates is—

Allahabad - - - - - - - - -	*Rs.* 114
Meerut - - - - - - - - - -	„ 69
Bareilly - - - - - - - - - -	„ 84

The disproportion is great, but no explanation was given. The number of Government and railway works at and near Allahabad would account for the high rates there. But the style of building at Meerut does not appear to be much inferior, though the cost is so much less.

Agra.—The estimates for the additions to this gaol are as follow :—

Two New Circles.		
Cash expenditure - - - -	*Rs.* 50,110	
Prison labour - - - - - -	„ 15,224	
		65,334
Old Gaol.		
Cash expenditure - - - -	*Rs.* 15,530	
Prison labour - - - - - -	„ 9,051	
		24,581
Total - - -		89,915

All the estimates named above have been sanctioned, subject to the reductions indicated on account of solitary cells. The amounts of cash outlay in the respective estimates, and the amounts that have been sanctioned, are as follow :—

	Proposed.	Sanctioned.	Reduction.
	Rs.	*Rs.*	*Rs.*
Allahabad - - - - - - -	2,73,016	2,19,390	53,626
Meerut - - - - - - -	1,15,950	1,08,523	7,427
Bareilly - - - - - - - -	1,64,455	1,18,721	45,734
Agra - - - - - - - -	65,640	65,640	—
Total - -	6,19,061	5,12,274	1,06,787

Lucknow.—This gaol is intended for 2,000 prisoners. When the estimate was first submitted, the cost, after deducting the value of convict labour, and reducing the number of solitary cells to 100, was estimated at 2,41,000 rupees, and a further reduction in the number of solitary cells brought down the amount of the estimate to 2,26,000 rupees. Even this reduced estimate made the cost per head no less than 113 rupees, and it has been directed that every endeavour may be used still further to reduce the cost.

Nagpoor.—This gaol will be capable of holding 1,000 prisoners. The estimate amounts to 3,86,000 rupees per 1,300 prisoners, or 297 rupees a prisoner. The Chief Commissioner was informed that such an expenditure was out of the question; attention was drawn to the Allahabad and Meerut estimates, and it was intimated that Government will look for a gaol designed to cost not much more than 75 rupees per head. It has also been directed to limit the solitary cells to 2½ per cent. on the number of prisoners.

At the same time a reference was made to the Home Department on a point in the Central Gaol system, which seriously affects the question of the expense of such buildings. The provision of separate sleeping cells is referred to in the reports of the Inspector General of Prisons; but it appeared doubtful what was the nature of the separation intended, and to what extent separate accommodation would be required. Pending a decision on this point, it has been thought sufficient to authorise the construction of solitary cells in the proportion of 2½ per cent. on the number of prisoners.

Calcutta Great Gaol.—After the outbreak of prisoners from this gaol in the beginning of 1861, a Committee was appointed, who recommended certain additions and alterations, the estimates, for carrying out which, amounting to 56,366 rupees, were sanctioned, and the works are in progress.

GENERAL.

ACCOMMODATION FOR PUBLIC OFFICES IN CALCUTTA.

The inconvenience occasioned both to Government and to the public by the dispersion of the various public offices in Calcutta, at great distance from one another, has long pressed for a remedy; the evil is now greater than ever, from the creation of additional offices; and the inconvenience to the public has been aggravated of late through the occupation by the State of numerous buildings which were formerly available as private residences.

The Governor General in Council was therefore of opinion that the consideration of a practical remedy for the existing evils, and of all the details which complicate the subject, should be delegated to a Committee of specially selected officers, and such a Committee was accordingly formed in May 1861.

The Committee made their first report in September, in which they recommended that there should be one building for the accommodation of all the public offices, and that it should be one of such architectural exterior as to be an ornament to the capital of India, and that its details should be such as to afford every comfort and convenience to those who will find daily occupation under its roof. No reasonable expense should be spared to secure light and ventilation, and every means adopted to render the daily routine of clerical life cheerful.

Of the various sites available for such a building, that of Writers' Buildings, occupying the whole of the north side of Tank-square, appeared to the Committee to be most suitable, from its position as well as the area which it covers. Accordingly, an arrangement was concluded in March last for the purchase of this property on account of Goverment for 7,75,000 rupees.

The services of Mr. Walter Granville, of the Eastern Bengal Railway Company, have since been secured as the architect to prepare the designs of the proposed building, under the special direction of an executive sub-committee.

No detailed estimate has been made, but, from a rough calculation, it is confidently expected that the centralization of the public offices will not only be a great public convenience, but will ultimately prove a financial saving to the State.

THE GENERAL POST OFFICE AND TELEGRAPHIC OFFICE.

Two designs have been before Government, one by Mr. Digby Wyatt, in the Western Saracenic style, elaborated with great care, and estimated at 8,04,391 rupees; and the other by Mr. Wray, for a building on substantially the same plan, but of more ordinary style, estimated to cost 6,74,210 rupees. But both designs were disapproved, as the style was considered quite inappropriate to the General Post Office and Telegraph Office, and the result in any Calcutta building material would be at once poor and fantastic. Indeed, it has not been possible even for the skill and learning of Mr. Wyatt to avoid the most striking incongruities in the attempt to adapt a style so peculiar to local requirements. A more suitable design has accordingly been called for; and, in the mean time a sum of 1,50,000 rupees has been allotted for the building in the Budget of 1862-63.

CHARGE FOR BAND STANDS.

With reference to an item of 1,460 rupees for a band-stand at Bangalore, which appeared in a return of estimates sanctioned by the Commissioner of Mysore, the Governor General in Council ruled that this ought not to be a charge on the State. Band-stands, if required for the pleasure of the residents of any station, should always be built by private subscription, or from local funds, if there are any available for such works.

CIRCUIT HOUSE AT MAULMAIN.

The purchase of a circuit-house at Maulmain, at a cost of 7,500 rupees, out of the reserve, was sanctioned in consequence of a strong representation by the local authorities that the want of such a building had long been felt. Almost every steamer that arrived brought some official on visits of inspection or other public duties, such as the Major General Commanding the Division and his staff, the superintendent of forests, the inspector general of hospitals, the chief engineer, inspector of police, &c., and, as there was no fit place for them to go to, they were, from not being on sufficiently intimate terms, or being unacquainted with people on the spot, put to considerable inconvenience for accommodation.

Archæological Survey.

In January last, the late Viceroy recorded a Minute regarding the investigation of the archæological remains of Upper India. The following paragraphs occur in the Minutes:—

"It is impossible to pass through that part (Upper India)—or, indeed, as far as my experience goes, any part—of the British territories in India without being struck by the neglect with which the greater portion of the architectural remains, and of the traces of bygone civilization have been treated, though many of these, and some which have had least notice, are full of beauty and interest.

"By 'neglect,' I do not mean only the omission to restore them, or even to arrest their decay; for this would be a task which, in many cases, would require an expenditure of labour and money far greater than any Government of India could bestow upon it.

"But, so far as Government is concerned, there has been neglect of a much cheaper duty; that of investigating and placing on record, for the instruction of future generations, many particulars that might still be rescued from oblivion, and throw light upon England's great dependency; a history which, as time moves on, as the country becomes more easily accessible and transversable, and as Englishmen are led to give more thought to India than such as barely suffices to hold it and govern it, will assuredly occupy more and more the attention of the intelligent and inquiring classes in European countries.

"It will not be to our credit as an enlightened ruling power if we continue to allow such fields of investigation as the remains of the old Bhuddist capital in Behar, the vast ruins of Canouj, the plains round Delhi, studded with ruins more thickly than even the Campagna of Rome, and many others, to remain without more examination than they have hitherto received."

In accordance with the sentiments expressed in the Governor General's Minute, an archæological surveyor to the Government of India has been appointed. According to the course sketched out by Colonel A. Cunningham, who was selected to fill the newly-created post, the first investigations would pass from South Behar into Tirhoot, Goruckpoor, and Fyzabad.

Granite at Gowhatty.

The Governor General's agent, North East Frontier, has brought to the notice of Government the existence of fine granite in considerable abundance at the Station of Gowhatty (Assam), and in situations where it could be easily worked and put on board country boats with scarcely any land transport. It is supposed that the granite was extensively used formerly in that part of the country, and dressed and covered blocks are stated to be lying all over the station, while the rocks show frequent traces of quarrying. Captain Hopkinson's Report was published for general information in the supplement to the "Calcutta Gazette" of May 8th, 1861.

Coral from Port Blair.

A consignment of Coral from Port Blair, shipped to Calcutta as ballast for the Public Works Department, has been subjected to experiments by the departmental officers. Although the lime-stone has not been analysed, nor the quality of the lime it produces ascertained, whether it is a rich lime or a pure hydraulic lime, the experiments establish satisfactorily that the coral makes a fair building mortar and a fair lime, both for plastering and for white-washing. It has been found that 100 cubic feet of the coral produces about 57 maunds of lime, and that the cost per 100 maunds of lime is from 35 rupees to 45 rupees, excluding the cost of the coral; the maund of lime measuring 2·4 cubic feet. The experiments also show that the lime will bear a large admixture of *soorkee*, probably three to one in bulk.

INDUSTRIAL.

Experimental Iron Works at Burwai in Nimar.

In the Report for 1860–61 mention was made of the design for establishing experimental Iron Works in Nimar. The project was originally brought forward by Major Keatinge, of the Bombay Artillery, when Political Agent and Superintendent of Nimar, and at his suggestion a small steam engine and rolling mill, suitable for rolling into bars the lumps made by the native method, were obtained from England, and erected in the Mundlaiser gaol workshops.

When on furlough in England in 1859, Major Keatinge learnt that great difficulty was experienced in working the machinery from want of proper reheating furnaces, and that furnaces erected from drawings in English scientific books were found to be useless with wood and charcoal fuel. He resolved to visit some of the iron works in Germany, to learn the methods of converting cast-iron into bars and sheets with vegetable fuel only, and obtained permission to do so at the expense of Government.

On his return to England he was permitted by the Secretary of State to make arrangements for the experimental works in question, and in addition to the rolling mill and engine, already on the spot, to provide a blast furnace and fuzes, the blowing cylinders to be driven by an engine of 15 horse-power, a small steam hammer and steam pump, and a small fitting shop, sufficient in fact for making cast-iron and converting it into wrought-iron, on a small but practical scale.

A properly qualified manager not being procurable in England, he was deputed by the Secretary of State to proceed to Sweden to engage one, and at the same time to improve his own knowledge of the manufacture of charcoal iron. This step was taken on the advice of Doctor Percy, the Professor of Metallurgy in the Government School of Mines, in Jermyn-street, from whom Major Keatinge had from the first received great assistance. At Stockholm Major Keating formed the acquaintance of Director A. Grill, the head of the Swedish Iron Comptoir, and the most esteemed consulting engineer and metallurgist in Sweden in all matters connected with the manufacture of iron. The designs for the works proposed were prepared under Director Grill's superintendence, and on his recommendation, too, Mr. Nils Mitander, who was educated at the Government School of Mines at Fahlan, and had been practically employed for some years on iron works in Sweden, was selected as manager of the works at Burwai.

Major Keatinge returned to India in August 1860, and was shortly after followed by Mr. Mitander, who arrived in Bombay in November 1860.

About the close of the official year a report was received from Mr. Mitander, giving an account of the progress of the works from the commencement to the end of September 1860. The following particulars are extracted from Mr. Mitander's Report.

"Ore of excellent quality has been found in several places and flax is abundant. The fuel is wood. The building of the blast furnace had been proceeded with, as far as possible, without the iron work expected from England. The casting-house has been completed. The rolling mill with its steam engine and three boilers, and a pumping engine, are ready to work. Two charcoal-houses are in course of construction, and the foundations of a third are in progress. Two charcoal ovens or charring pits have been dug, and the brick lining is in progress. A calcining kiln on the Swedish model has been erected for calcining the ore before smelting.

"Attempts at making fire bricks have hitherto proved unsuccessful, owing to the impurity of the clay, but it is hoped that greater success may be attained with a new clay found at Chundgurh."

Coal Field near Kotree in Sindh.

The site of these deposits is the Lyneah Valley, about 27 miles from Kotree. The existence of the beds was accidentally discovered during the sinking of a well by some of the Belooch inhabitants.

Subsequent inquiry has shown that the mineral is a lignite of inferior quality, containing large quantities of iron pigrites. It is extremely liable to spontaneous combustion, and consequently unsuited for ship use, or to be stored in considerable quantities. During combustion the fumes of sulphur given off are very offensive, and act injuriously on the fire bars of the furnace or the tubes of a locomotive. It seems also liable to crumble away on exposure to the air. In short, what was supposed to be coal is merely a lignite, useless for steam or smithy purposes.

On the whole, the general conclusion is, that neither the ascertained value of the fuel hitherto found, nor the prospect of obtaining it in any quantity, or at a cheap rate, appears sufficiently important to warrant the very considerable expense at which alone further investigation could be carried out.

Kumaon Iron Works.

The arrangement referred to in the Report for 1860–61, page 29, of transferring these works at a valuation to a private company, has been completed, and there is every reasonable prospect of the objects contemplated by Government being eventually attained. Furnaces have been erected at the works, and the heavy machinery attached to them has been manufactured on the spot. The preparation of pig iron continues to go on, and some few articles have already been made for sale. The company has engaged a Swedish manager, and their operations will be looked forward to with interest.

AGRICULTURAL.

Forests in the Saugor and Nerbudda Territories.

It was stated in the last Annual Report (page 30) that the subject of the better conservation of forests in various provinces of the Bengal Presidency had been under the consideration of Government in this Department; and that Superintendents of Forests had already been appointed in Oude, and the Saugor, and Nerbudda Territories, and an officer deputed to explore the forest tracts of Nagpoor.

The first Annual Report on the forests of the Saugor and Nerbudda Territories has since been submitted.

The forest tracts reported upon are those of the places noted in the margin. Speaking of them collectively, the Superintendent, Captain Pearson, remarks that though the resources of these forests are unlimited, their present condition is as bad as it practically can be. They have suffered greatly from indiscriminate felling and entire neglect through a long series of time; but the greatest damage has been inflicted within the last few years. Exaggerated reports of the gains to be reaped got abroad in 1857, when contracts to supply timber

Jubbulpoor.
Mundlah.
Seonee.
Baitool and Hoshungabad.
Sangor & Dumoh.
Chindwarrah.

timber for the railway were first made, and numerous Mahajuns, in consequence, advanced large sums of money to the Ghonds to fell every teak tree they could lay hands on. In Mundlah, 40,000 teak trees are said to have been felled on account of one man alone; besides which an European contractor undertook to supply 100,000 teak sleepers, most of which are believed to have been cut, though he has not got them. This wasteful felling of teak has been entirely stopped.

Another serious evil complained of is the system of Dhya cultivation, or the cutting and burning of the jungle to form fields, as practised by the Ghonds, the Koorkoos, and the Bygurs, more or less, all over the hills. The practice is specially injurious, as they are fond of selecting sites where the best kinds of timber grow. But this is a matter difficult to be dealt with, as these hill people never saw a European till they saw Captain Pearson, and unless the utmost caution is used, are liable easily to be frightened.

Charcoal-burning, in certain localities, has added to the devastations that have been committed in these forest tracts.

The remaining quantity of teak in the forests in question, owing to the havock that has taken place hitherto, is now small. It is doubtful if it would suffice, under any circumstances, to supply the number of sleepers required, and it seems certain that the attempt to supply them would for very many years extinguish the supply of teak altogether. There are eight other sorts of wood, named by Captain Pearson, which are likely to answer well for sleepers. It is not to be supposed that they will last as long as teak; but teak sleepers will not last for ever. Were the cutting of teak sleepers permitted, and a sufficiency could be found for the first construction of the road, some other material would have to be resorted to for renewing it some years hence. It would be better, therefore, that other woods less durable should be made use of now, than that the only chance should be abandoned of restoring the teak forests to productiveness.

PUNJAB FORESTS.

A system of forest conservancy was introduced in the Punjab in 1852, and has since been in operation. Precautionary measures appear to have been adopted with success for preventing the wanton and wasteful destruction of trees. Measures of reproduction, however, by means of planting and sowing, have hitherto proved failures; but it has been found that the true method of attaining this object is by a careful protection of the sites of exhausted forests, whereby a spontaneous crop of young trees is ensured.

KUMAON AND GHURWAL FORESTS.

The present state of these forests, as gathered from the Report of the Commissioner of Kumaon, is satisfactory proof of their rapid growth. It was intended to make available the timber yet remaining in parts of the forests hitherto considered inaccessible. This would be disposed of probably at less profit than that heretofore brought into the market, but it is highly satisfactory to find that, with proper management, and without losing sight of the greater importance of preserving and restoring them, the forests may be worked to a good annual profit; and that a sufficient supply of timber to the market may be annually furnished, without expending all the existing timber before new has grown up.

FORESTS OF BRITISH BURMAH.

The forests of the Province of Pegu, as well as those of the Tenasserim and Martaban Provinces, have been thrown open to private enterprise, under a system of triennial permits. Every permit-holder is required to enter into a written agreement, one of the stipulations of which is, that he shall not girdle or fell any green teak trees.

HIDGELEE EMBANKMENTS.

The Hidgelee District lies immediately at the mouth of the Hooghly on its right bank. The ground is very low; and but for embankments, would nearly everywhere be covered by the sea, to a depth of two feet at spring-tides. But during storms from the south and south-east, coincident with spring-tides, the water of the Bay of Bengal is heaped up at its northern extremity to an extent varying with the intensity and direction of the wind; so much so, that in an ordinary gale the district would be submerged an additional depth of six feet, but for the embankments; in a gale of second class power, the flood would be no less than 11 feet deep over the country; and it is on record that, in 1833, a very disastrous storm occurred, laying the district no less than 14 feet under water. On this occasion and on minor visitations during the two years immediately preceding, it was estimated that Government lost in the Hidgelee District 24 lacs of revenue; whilst 19,000 human beings and 40,000 cattle lost their lives.

The whole sea-coast line is intersected with numerous salt water creeks and lines of fresh water drainage, and in the early periods of embanking, owing to the sea rushing up these inlets during the storms, against which the embankments were intended to guard, and to those embankments not being continuous along the lines of the inlets, the main embankments nearer the sea were frequently rendered useless. They were *turned.*

The sea rushing up the inlets took them in rear. The case is now different. The interior lines of embankments are now reported perfect, and it is the main sea-line which is the subject of anxiety, and it alone requires to be completed.

The estimate for the work, after reducing the allowance for contingencies from 10 to 5 per cent., amounts to 6,03,120 rupees. The full estimate has been sanctioned to prevent further reference, and with a view that the work may be pushed forward to completion with all practicable expedition.

Adjai Embankments.

With the exception of three portions, the embankments of the Adjai River, like those of the right bank of the Damooda, have been abandoned. So far as present observations extend, no injurious effects upon cultivation are observable, nor do the adjacent lands show any appearance of deterioration from sand deposits. The actual results of the abandonment of all such embankments can, however, only be ascertained and reported after the lapse of a year or two more, or after an extraordinary season of flood.

Action of Hill Streams south of Umballa.

At the suggestion of the Lieutenant Governor of the North Western Provinces, an officer has been appointed to observe the action of the Hill Streams to the south of Umballa, with a view to the ultimate employment of a surveying party to ascertain the practicability of storing the monsoon supply. These torrents issuing from the lower range of hills cross the Grand Trunk Road between the 92d and 132d miles from Delhi. It is conceived to be possible to construct large artificial basins for the reception of the water of these streams during the rains, in such a position as would allow of irrigation; so at the same time relieving the Trunk Road of the greater part of these bodies of water, which will always otherwise be a source of anxiety from their vehemence and volume, even when the permanent bridges have been constructed; and thus utilising large quantities of water now not only going to waste, but causing constant trouble.

Colonel Dickens's Soane Canal Scheme.

Colonel Dickens's Soane Canal Scheme received the approval of the Lieutenant Governor of Bengal, which was concurred in by the Government of India. A full outline of the project was published for public information in the supplement to the "Calcutta Gazette" of the 19th March 1862. It has been forwarded to the Secretary of State with a recommendation that suitable publicity should be given to it with the view of attracting British enterprise to the proposal.

Irrigation in Nagpoor.

Mr. H. Stanborough being understood to be possessed of considerable local knowledge and experience from having been long a resident in the cotton districts of Nagpoor, was invited to favour the Government with his views on a cheap system of irrigation in that province. The invitation has been duly responded to by that gentleman.

Mr. Stanborough remarks that the failure of cotton in the year 1861, through the immense fall of rain before August, and the total want of it since, shows of how much importance is the question of irrigation. This is illustrated by his experience of five years in the cotton districts.

Mr. Stanborough does not approve of the plan of flooding cotton fields as is done to paddy; but in his opinion irrigation should be given by sub-soil, or percolation and evaporation, which can only be effected by a network of nullahs and canals. Nature has done much for the province in providing nullahs, and all that is now required is to retain the water two or three months longer in them, or until the crops are all secured.

Mr. Stanborough's views, of which merely the heads are above given, have been circulated to the local officers, with a request that the best means and the earliest opportunity may be used for a detailed investigation of the subject.

Extension of Irrigation Works in the North-Western Provinces and the Punjab.

The following succint details will show what has been done from 1st May 1860 to 30th November 1861, to extend irrigation in the North Western Provinces and the Punjab.

In the Northern Division Ganges Canal, 186 miles of rajbuhas or irrigation lines had been excavated up to 1st May 1860, and these have since been extended to 285 miles, showing an increase of very nearly 100 miles in this division. It is not considered that the part of the country traversed by this division of the canal needs many more rajbuhas, as it is nearly capable of irrigating the whole tract which it was intended it should irrigate, unless the Deobund Branch be constructed, in which case, about 150 miles more of irrigating lines will be required, but it has not been positively ascertained whether a sufficient supply of water can be spared for this line.

Chap. VIII.
Public Works.

The progress made in the Upper Central, or 2d, Division of the Ganges Canal, during the period in question, will appear from the following Statement:—

	Finished.		Expected to be completed by the end of December 1861.		Line laid out and ready to be commenced.	
	Main Canal.	Futtyghur Branch.	Main Canal.	Futtyghur Branch.	Main Canal.	Futtyghur Branch.
Canal Excavation	- -	24	- -	19	- -	113*
Escape	- -	6	—	—	—	—
Rajbuhas	50	6	8	28	—	67

Between the 1st May 1860, and 1st May 1861, the increased irrigation in area was 35,656 beegahs or 35 square miles, the revenue derived from which has been 35,031 rupees.

In the Lower Central, or 3d Division Ganges Canal, since 1st May 1860, the total length of new rajbuhas completed was 77 miles, bringing 65 new villages under full irrigation, and giving increased means to 119 others. The total length of rajbuhas nearly completed, and which was expected to be available for the ensuing rubbee (spring) watering was 65 miles. These irrigating lines will bring 86 new villages under their full influence, and improve the supply of water of 131 more. Thus 142 miles of rajbuhas would have been completed in time to provide irrigation during the approaching rubbee.

In the Cawnpoor, or 4th Division of the Ganges Canal, 41 miles of irrigating lines have had water admitted into them since the 1st May 1860. Twenty-six miles were to be opened in November, and 50 miles more in December, in time for the rubbee crop; 90 miles of rajbuhas were in progress, of which 70 miles would be capable of irrigating during the rubbee of 18626–3. Numerous gools or minor water-courses had besides been made to distribute water among the cultivators.

In the 5th, or Etewah Terminal Division of the Ganges Canal, 91 miles of new rajbuhas have been excavated since May, 1860, from which irrigation was looked for before the 15th April 1862, and 208 miles were expected to be completed in time for the next khurreef, or autumn crop following 1st May 1862.

No extension of irrigation has been effected on the Eastern Jumma Canal since May, 1860, it having reached its maximum some time ago.

On the Dhoon Canals the only works for the extension of irrigation since May 1860, had been the construction of a masonry channel of the Jakhum Canal, about 5,500 feet in length, completing the whole of the hill line (the most difficult part) of four miles, with the exception of two aqueducts, and 3,300 feet of the masonry channel of the Rani Pokru Branch. On the Beejapoor Canal, 4,213 feet had been lined with masonry, tending to improve the work very much; and on the Kalunga Canal a masonry supply channel has been made 8,300 feet long.

On the Rohilkund Canals the works in extension of irrigation since May 1860, consist of the completion of the Gherem and Sissowna Dams, and the sanctioned additions to those at Bhampoor and Choorylee, the excavation of two new lines of canal from the Gherem Dam, and completion of two irrigating lines at Oogempoor, all on the East Bygool River, together with the extension of the Kylas Canal on which very little work was done in 1860-61.

In Bundlekund all irrigation was suspended during the rebellion, and the works which had been constructed were much injured. The damaged works had to be restored, and new projects drawn up, and the work was resumed on the 1st December 1860. The works that existed at Mahoba consisted of sluices and irrigation channels from three lakes which have been repaired; the channels have been increased in length from 10¾ to 16¾, and the irrigable area from 1,290 to 3,860 acres, at a cost of about 1,600 rupees. An irrigating channel was in course of construction from a fourth lake (Kerut Saugur), which will render irrigable 420 acres at a cost of 1,000 rupees, with a guaranteed return to Government of 10 per cent. on the outlay; other works of restoration have also been executed. From Jeytpoor Lake a sluice and 1½ mile of irrigating channel, capable of irrigating 491 acres, have been constructed, and during November the channel was to have been prolonged six miles more, and would irrigate an additional area of 1,681 acres.

On the 1st May 1860, the Agra irrigation and drainage works consisted of the following, viz., 1st, the Futtehpoor Seekri Bund, containing the Burkhole Canal masonry head; the main outlet or Bhyesa Maree, to which has since been added a pucka masonry weir at the west flank of the bund of 400 feet clear waterway fitted with planks, and 1,800 feet of roadway in length by 28 feet in width.

At

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* 113 miles in the event of the Canal being completed to Futtyghur as originally designed.

Chap. VIII.
Public Works.

At the south end of the reservoir, and near the village of Mundee Mirza Khan, a weir and canal-head has been constructed, and a canal partly excavated (about 12 miles); this line has been called the Kheyragurh Canal. Its width at bottom is 40 feet with slopes one and half to one; the total length when finished would be 23 miles and 100 yards. It was commenced on the 25th April 1861, but the whole line could not be completed before the commencement of the irrigating season in September; a portion, however, about seven miles, received water and irrigated some large tracts of land. This canal with its masonry works was expected to be completed before the close of the official year.

The following additions have been made in the Burkhole Irrigation Canal:—

Six masonry dams and six outlets for irrigation. A branch canal was commenced on the 25th April last, and had been excavated sufficiently to carry water for irrigating during the season, and would be completed, with its masonry works, before the end of the official year. The Burkhole Branch Canal is 7 miles, 5 furlongs, and 180 yards in length.

Drainage cuts of an aggregate length of 12½ miles had been excavated, and a bund of 450 feet in length for the protection of the village of Nyabas had been constructed

During 1859-60, 37,149 acres of land, yielding a revenue of 91,184 rupees, were irrigated by the old Huslee Canal, 104 miles in length, and which during the year was kept wellfed at various points in its course by the Baree Doab Canal. During 1860-61, 48 miles of distributing channels were opened out from the Baree Doab Canal, and the total area irrigated amounted to 1,22,729 acres, yielding a revenue of 2,17,979 rupees. From the 1st May to 1st November 1861, a further length of 123 miles of rajbuha had been opened. The returns for the half-year were estimated as follows:—

Acres - - - - - -	51,632
Revenue - - - - - -	*Rs.* 1,26,549

Since 1st May 1860, 171 miles of rajbuha had been completed, and 106 miles were in progress, of which 40 miles were nearly ready; 93 miles of the Baree Doab Canal (Main Branch, Lower) were expected to be ready by the end of December 1861.

In the Upper Sutlej Division the Sohag and Kutora Canals (the former with its rajbuhas, 73 miles, and the latter 27 miles), were being proceeded with. The Khanwah Canal with its rajbuhas, measuring 113 miles in length, has been partially cleared; the canal itself at its mouth only, the rajbuhas throughout.

In the Lower Sutlej Division, the inundation canals, aggregating 659 miles in length, had been cleared out of silt and maintained in working order. No extension of irrigation had taken place, but the existing irrigation had been perfected.

The same may be said of the canals from the Indus in Dehra Ghazee Khan District; aggregate length, 578½ miles. Proposals were to have been submitted for the extension of some of the canals.

The following shows what had been effected from the 1st May 1860 to 1st November 1861 in extending irrigation in the Upper Sutlej Division Inundation Canals.

The work on the Kutora Canal has been exclusively confined to the 1st Division, that is, from its mouth to the village of Hoossain Khan, and to the surplus channel which is to connect the Kutora with the Khanwah Canal; the object being to effect the junction of the two canal as speedily as possible.

The work is being carried on in two places at the same time. In that nearest the mouth, the length is 10,488 feet, breadth 30 feet, and average depth 1,509 feet. In the other portion near to Hoossain Khan, the length is 6,050 feet, breadth 30 feet, and average depth 7·15 feet; the whole cutting required on this sub-division is 1,60,36,995 cubic feet, of which 76,28,281 cubic feet are completed. The surplus channel from the main regulating bridge at Hoossain Khan, upon which excavation is required, is in length 44,500 feet, and the whole quantity of excavation required is 61,81,445 cubic feet, of which 33,38,409 cubic feet had been taken out, leaving 28,43,036 cubic feet to be done; 8,000 feet of this channel had been entirely completed with the slopes, and the remaining portion was under progress.

The whole of the materials for the regulating bridge at Hoossain Khan had been collected and prepared.

The escape channel at Tahr of the Upper Sohag Canal was completed in July 1861. Its length is 5,860 feet, average depth 6 feet, bottom width of canal 35 feet, slopes 1 in 1; the quantity of excavation was 17,05,184 cubic feet.

The total length of excavation of the Upper Sohag Canal is 27·08 miles; the quantity of excavation taken out was 59,04,793 cubic feet, leaving 83,30,497 to be done.

The whole length of the Boongga Sahilwan rajbuha is about 5 miles in length, 3½ of which had been finished; the quantity excavated being 8,66,400 cubic feet.

A new cut in the Khanwah Canal, 1,262 feet in length, 40 feet wide, average depth 13 feet, was completed in April last. Another new cut, 2,260 feet in length, 40 feet broad, average depth 12 feet, had also been completed. The object of these cuts is to straighten and improve the canal and save a large sum that would require to be spent annually in clearing out the silt from its former tortuous course. In addition to these, two other cuts were in hand for the same purpose.

The following statement may likewise here be added, showing the work done on the Mooltan Inundation Canals during 1860-61.

The aggregate length of the Mooltan Canals is 659 miles; the number of villages irrigated 711. Out of 5,82,403 churs called out, 4,82,554 were in attendance, 32,208 were exempted in accordance with the rules in force, 67,541 churs were absent, and paid a fine of 16,910 rupees.

Including the value of chur labour performed, the total expenditure during the year was 1,83,792 rupees; the cost of the Supervising Establishment, 19,881 rupees, giving a per-centage of 10·81.

No less than 1,55,924 acres of land had been irrigated by canal water during the year, yielding a land revenue of 3,98,276 rupees, of which 2,13,124 rupees were credited to the canals, being the enhanced rate of assessment owing to their existence.

Each mile of canal had irrigated 236 acres of land, yielding an average return of 604 rupees per mile, or 2½ rupees per acre. The cost of clearance (only) of each mile of canal amounted to 183 rupees, exclusive of cost of establishment, which would increase it to about 200 rupees per mile.

Effects of Percolation from the Ganges Canal.

In September 1859, the Government of India had under consideration a correspondence submitted by the Government North Western Provinces, having reference to the reported deterioration of certain portions of the Ganges Khadir lands, attributed to percolation from the Ganges Canal, when full reports were called for on the subject.

It was alleged that deterioration of land had taken place at two points, the first in the Mozuffernugger District, the second in the Meerut District.

The first point is nearly south of the town of Munglour, where the Solani debouches into the Ganges. Reasons other than the action of percolation from the canal were brought forward, accounting partially for the deterioration complained of, such as a change in the course of the Solani, owing to a casual obstruction caused by some fallen trees and the increase of jungle on the tract checking the free current of the Solani overflow. With neither of these causes had the canal any connexion. The latter was mainly due to the mutiny. But Government was not disposed to lay any stress on them, being of opinion that the saturation of the soil of the tract in question would be nearly the same whether those additional causes existed or not. Rise of the level of water in wells in the high land between the canal and the Solani since the opening of the canal was proved to the extent of 8 feet. And with a head pressure of 51 feet, there is nothing surprising in the Khadir land becoming so saturated with water as in places to become a swamp impassable by elephants, as was found to be the case. The surface soil when turned up by the plough never dried. Formerly it was used to dry and produce a crop.

On full consideration, the Government of India agreed with the Superintendent General of Irrigation in accepting the evil as one caused by the canal. Compared, however, with the good resulting from that canal, this evil was altogether insignificant.

The Government North Western Provinces adopted the proposal that the Irrigation Department of those provinces should be debited with the loss of land revenue which has resulted from the tract in question being rendered unculturable until drained. At the same time that Department will undertake the operation of Draining the tract in question by simple means, for which the bed of the Solani affords facilities, and will be credited with the amount of revenue realised in consequence of its operations.

This arrangement was agreed to by the Government of India on the basis either of annual rent for the ground being paid by the Irrigation Department, equal to the net rent realised by them from the tract in question when uninjured, or of purchase of the land debitable to the Ganges Canal in the way customary for other land taken up for canal purposes.

The result of the inquiry failed to show that any real ground of complaint existed in connexion with the alleged evil in the Meerut District, or that swamps in the Khadir of that district have increased in extent.

COMMUNICATIONS.

Imperial Roads.

Returns have been called for from every part of the country of all imperial roads, their extent, and present condition. These, when received, will furnish data for preparing a complete road map for the whole country.

Railway Feeders.

The importance of constructing and improving roads as railway feeders has been fully recognised by the several Local Governments, and the energy with which this Department of work has been prosecuted in every direction, will be found fully detailed in the respective administration and progress reports of those Governments.

The Bombay and Agra Road.

This important line of communication has been under construction for many years, but in 1858-59 the Government of India resolved that the work should be prosecuted with more vigour to completion. Great difficulties have been experienced in carrying on the work owing to the scanty population and pestilential solitudes to be met with in some of the districts along the line of road. From this cause principally the construction of the road has been much retarded. But the Governor General in Council in the Budget Orders of 1861-62 expressed his most anxious desire that the work should be pressed on to completion, and that larger allotments and other facilities should be afforded in order "that this long-standing opprobrium of the Department should be wiped out." In accordance with these views and wishes of Government, the construction of the road is being pushed on as rapidly as real economy of construction will admit. The Annual Progress Report of the Department will show what has been actually effected in each section of the road.

The Great Deccan Road.

The continuation of the Great Deccan Road from Jubbulpoor to Nagpoor has received particular attention, and every encouragement in additional money grants and otherwise has been afforded for the vigorous prosecution of the work. The road from Mirzapoor to Jubbulpoor is reported to be excellent, and consequently there exists a good and rapid communication from Jubbulpoor to the Ganges. The road from Jaulnah to Bombay is also good, and the residents in that quarter have no difficulty therefore in reaching the Western Presidency. But the state of the Deccan Road between Nagpoor and Jubbulpoor offered the greatest obstacles to the export of cotton, which, notwithstanding the difficulties of communication, seeks export rather by this line than towards Bombay. Nagpoor being thus mainly interested in the completion of the line between Jaulnah and Jubbulpoor, it was found expedient to place the entire extent of the work south of Seonee under one charge, namely, that of the Public Works officers of Nagpoor.

Roads in Nagpoor.

In June 1861 the late Commissioner Major E. K. Elliott submitted a scheme of roads for the province of Nagpoor. The requirements represented in the plan were as follow:—

Imperial Roads.	
1st Class - - - - -	104 Miles.
2d „ - - - -	545 „
Provincial Roads.	
2d Class - - - - -	460 Miles.
3d „ - - - -	300 „
District Roads.	
4th Class - - - - -	1,000 Miles.

The roughly estimated cost was—

100 miles 1st Class Road, at 7,000 rupees a mile - - -	7 lacs.
1,000 „ 2d „ „ 3,750 „ - - -	37½ „
300 „ 3d „ „ 1,000 „ - - -	3 „
1,000 „ 4th „ „ 250 „ - - -	2½ „
Total *Rs.* -	50 lacs.

The complete system for the province would, therefore, cost on this estimate not less than half a million sterling.

The scheme bore directly on the export of cotton. The cotton-producing districts are Nagpoor and Chanda, and outlets are provided by the Deccan Road northwards to Mirzapoor, and westward by the same road to Bombay. The southern road south of Nagpoor, passing through the cotton mart of Hingunghat, extends to Wurrora on the Wurda River, whence a branch runs to Chanda. This will prove an important tributary to the stream of traffic northwards, while the road from Hingunghat to Nachengaon will aid its escape towards Bombay.

The only cotton exported from Raepoor is of a coarse kind, and on a small scale to or towards the eastern coast; but the improvement of the rude and almost unknown track pursued by the Banjaras has not been lost sight of in the scheme; according to which Raepoor will also be connected with the Deccan Road at Jubbulpoor.

Progress had been made during the year for realising the projected system of communications.

The arterial line of traffic is the Great Deccan Road. Besides the portion in the Nagpoor Province, the Public Works Department of Nagpoor, as already stated in the preceding paragraph, has been entrusted with the construction of its extension beyond the northern boundary as far as Seonee. Estimates have been prepared and sanctioned for the portion which lies between Kamptee and the point nine miles beyond the northern boundary; and from Nagpoor southwards to within about a mile of the river at Bhoree, a distance of 16 miles. Other sections of the south and east Nagpoor roads, in various lengths, had been sanctioned from time to time, and in short the improvements of communication in the province were being carried out with a commendable spirit of earnestness and vigour.

It may also be remarked that the roads of Nagpoor generally, both imperial and district, have a direct bearing upon the railway. The Great Deccan Road south of Nagpoor runs nearly parallel and close to the line of the railway from its station at Kowtah to its northern terminus at Nagpoor. The Southern Road, south of Nagpoor, will be one of the most important feeders in the province, joining as it does the great cotton mart of Hingunghat with the railway station at Bhosee to the north, and by a district road with the railway station to Kowtah to the south. A shorter district road will also join the Hingunghat cotton mart with the railway station at Sindee, a distance of only 19 miles. The Eastern Road again is the chief railway feeder from the east, joining on to the railway station at Nagpoor itself. All the portions of the Great Deccan and Southern Roads to the north of Nagpoor are also railway feeders, joining, as the former one does, the two railway stations of Nagpoor and Jubbulpoor, and the latter joining the Nagpoor Station. Of the district roads, that from Hingunghat to Kowtah has already been alluded to; and the one from Tullegaon to Kowtah passes through the very heart of the cotton country, and it will serve to join the mart of Arvee (south of Tullegaon) with the railway station at Kowtah.

Roads in Berar.

The subject of improving the communication between the cotton marts of Berar and the Great Indian Peninsula Railway, and between the south-western portions of that province and the road *viâ* Ahmednuggur to Bombay, has received full consideration; and in furtherance of the objects in view, the clearance and improvement of the following lines of road had been decided upon, viz.:—

1. Akote to Aukola.
2. Morsee *viâ* Oomrawuttee to Budneira.
3. Hingunghat to Natchenguam.
4. Hingojee, Nursee, or Naudpoor to Pytun.
5. Peepree to Budneira.
6. Malligaum to Akola.
7. Chanda to Hingunghat.
8. Khamgaum to Mulkapoor or to Andoora.

Imperial Roads in the N. W. Provinces.

In October 1861 the Lieutenant Governor submitted a comprehensive scheme of imperial roads for the North West Provinces, of which the following is an abstract statement:—

DIVISION.	No. of Road.	DESCRIPTION OF LINES.			Mileage.
		From.	*Viâ.*	To.	
1. Benares Division. (6 Districts.)	1	Doorgaotee, on the Grand Trunk Road.	Ghazepoor and Deohree Ghat, on Gogra.	Goruckpoor - -	102
	2	Deohree Ghat, on Gogra	Azimgurh and Jounpoor	Allahabad - - -	116
	3	Azimgurh, or the new cantonment in its vicinity.	- - - -	Benares - - -	50
				Total per Division -	268
				Average to each District	44⅔
2. Allahabad Division. (4 Districts.)	1	Allahabad - - -	- - - -	Pertabgurh - - -	27
	2	Dalamow, in Oudh, on Ganges.	Futtehpoor, Chillatara Ghat on Jumna, Banda, Kallingur, Nagode.	Myhere. on Great Deccan Road.	153
	3	Cawnpoor - - -	- - - -	Kalpee - -	45
				Total per Division -	225
				Average to each District	56¼
3. Agra Division. (6 Districts.)	1	Furruckabad - -	Bewur, Mynpooree, and Etawah.	The Chumbul - -	65
	2	Kutchla Ghat, on Ganges.	Khasgunge - - -	Borders of the Allyghur District.	26
	3	Agra - - - -	Muttra - - -	Borders of Delhi District	60
	4	ditto - - -	- - - -	Bhurtpoor - - -	32
				Total per Division -	183
				Average to each District	30½
4. Rohilkund Division. (5 Districts.)	1	Furruckabad - -	Bareilly and Mooradabad	Nuggeena - - -	200
	2	Shahjehanpoor - -	- - - -	Jullalabad - - - Kuttra - - -	35
	3	Bareilly - - -	Budaon - - -	Kutchla Ghat, on the Ganges.	52
	4	Huldwanee - - -	- - - -	Nynee Tal - - -	22
				Total per Division -	309
				Average to each District	61⅘

DIVISION.	No. of Road.	DESCRIPTION OF LINES.			Mileage.
		From.	*Viâ.*	To.	
5. MEERUT DIVISION. (6 Districts.)	1	Gurhmukhtesur		Meerut	29
	2	Meerut	Moozuffernuggur and Roorkee.	Dehra	98
	3	Dehra	Rajpoor	Landour	18
	4	Hattrass	Sekundra Rao and Khasgunge.	Borders of the Allyghur District.	30
	5	Moozuffernuggur	Shaharunpoor and Chilkana.	The Jumna	48
	6	Anoopshuhur on the Ganges.		Boolundshahur	34
				Total per Division	257
				Average to each District	$42\frac{5}{6}$
6 & 7. JHANSIE and JUBBULPOOR DIVISIONS. (12 Districts.)	1	Kalpee	Orai and Jhansie	Saugor	200
	2	Saugor	Dumoh and Kuttingee	Jubbulpoor	97
	3	Baitool, Southern Boundary.	Hoshungabad and Nursingpoor.	ditto	210
	4	Dumoh		Jokhai, on the Great Deccan Road.	60
	5	Jubbulpoor	and interior roads.	Mundlah	133
				Total per Division	700
				Average to each District	$58\frac{1}{3}$
				GRAND TOTAL MILEAGE	1,942

The total area of the districts for which the above mileage of 1,942 miles of road are proposed is little short of 100,000 square miles, giving an average of about one mile of road to 50 square miles of country, or an average length of about 43 miles of road for each of the 45 districts.

It must be noted, however, that all this is not work yet to be done. From 350 to 400 miles of these roads are already metalled; another considerable portion, though not metalled, is formed and bridged to a greater or less extent. Some of the metalled or formed roads require additional width, or thorough repairs, or more bridges. The whole affords a basis on which great improvement may be developed in a short space if the operations be so planned (as it is intended), as in the first instance, to connect portions already metalled, to bridge serious obstacles on roads already metalled, to metal good fair-weather roads already existing.

COTTON ROADS IN THE PUNJAB.

A highly interesting report regarding roads for facilitating the export trade of the Punjab, more especially the export of cotton, submitted by the local Government, has already been published in the Supplement to the "Calcutta Gazette," and a reference to it will show that this important subject has received due consideration.

ROADS IN BENGAL.

At an early date the late Lieutenant Governor was induced to call for reports from the Commissioners of Revenue and the Superintending Engineers, in regard to the district communications, inviting suggestions for the improvement of any particular roads by which it was thought that the transit of cotton may be facilitated. The orders issued by the Government of Bengal on a consideration of these reports were to the following effect:—

Behar Circle.—To make the existing track between Chuttra and Chumparun on the Grand Trunk Road a good road for cart traffic. To open a cart road from Taldondah on the Grand Trunk Road opposite to the terminus of the railway extension on the Burrakur River through Purulia to Chybassa in Singbhoom. These roads will allow the cotton brought to Chuttra, and grown in Singbhoom, being conveyed to the Grand Trunk Road and Railway.

Northern Circle.—A line of road to be surveyed from Pulsa to Nonihaut; also from Taljeera to Burhait.

Cuttack Circle.—To construct an imperial road from Cuttack to Sonepoor, a rising mart at the turn (northward) of the Mahanuddy River; the portion lying over the Burmool Pass to be constructed first. Likewise to report on a projected line of road from Sonepoor to the Cuttack and Sumbulpoor Road; as also on a road which has been talked of from Sumbulpoor to Chundeepoor, provided cotton fit for exportation is produced at the latter place.

Information was called for regarding the construction of two roads from Dantoon on the Midnapoor and Cuttack Road to the Bulliaghye River, and from Kasharu further on the same road to Dehra, on the road between Midnapoor and Calcutta, in order to assist cotton on its way from the districts to the westward of the Cuttack Imperial Road.

Darjeeling.—The making of the following roads was under contemplation:—

1. From Muttigurha to Gorawara, and the Tusta River.
2. From Garidhoora to Titalya *viâ* Ramdangah and Phansedeewa.
3. From Nakiswarbary on the Mechi River to the Darjeeling Road near Bubath.

Burhee and Hazareebag.—Construction of a metalled road between these places, including four river causeways.

Dehree.—The project of a road to connect Dehree on the Grand Trunk Road with the East Indian Railway had also been under consideration.

Jessore.—Construction of a road from Calcutta to Jessore beyond Baraset.

Midnapoor.—Completion of the Calcutta and Midnapoor Road between Pauchkoora and Koela Ghat.

Berhampoor.—Completion of the road connecting the cantonment of Berhampoor with the Alumdangah Station of the Eastern Bengal Railway.

Gya and Patna.—Improvement of the road between these populous and wealthy towns.

Bhagulpoor.—Construction of the northern section of the Sooree and Bhagulpoor Road from Bowsee to Bhagulpoor.

Assam.—Bridging of the main trunk line to Assam, and placing the line from Bugpoor to Goalpara in an efficient state.

Lahore and Peshawur Road.

In the Report for 1859-60, as well as that for the last year, the history of this road was traced from the beginning. It is only necessary to add here that during the twelve months under report, an additional grant of two lakhs was made at the instance of the Punjab Government for the prosecution of the work.

Soane Causeway, Grand Trunk Road.

In 1858 the Government of India sanctioned the resumption of work in constructing the permanent causeway over the wide sandy bed of the Soane River in the line of the Grand Trunk Road crossing. During the year under notice, a further sum of 119,408 rupees was sanctioned for the completion of the causeway, and an expenditure of 658 rupees for a landing-place.

Works on the Godavery.

At the close of the year the following was the state of progress of the works on the Godavery:—

First Barrier.—Permanent Works.—Everything in readiness for commencing with the anicut. Two hundred tons of limestone broken for burning; firewood collected, and the kiln when lighted would supply sufficient lime to keep 150 bricklayers at work, 100 of whom had already found employment. A length of 300 yards of the foundations for the flooring of the shoal at the left end of the anicut had been cleared, and sufficient stone was ready quarried and deposited for use on this part, and for 250 yards more of the anicut.

First Barrier.—Tramway Works.—The earth-work of 6½ miles was all but quite completed, and about three miles more of the heaviest part, where the road has to be carried to the top of the canal embankment, is in hand. The bridges and culverts in the first 6½ miles were under construction, and the largest of them nearly completed. Two and a half miles of sleepers had been laid on the formed road. The foundations had been cleared for the Seetumpett Tunnel, two lakhs of bricks moulded, and half a lakh burnt, 800 cubic feet of granite quarried, and other building materials collected on the spot. About 2,800 work-people had been employed on the permanent and temporary works at this barrier. Several new boats were in various stages of progress, and 17 tramway goods waggons nearly finished.

Second Barrier Tramway.—Seven miles of earth-work had been completed, and about three miles of road-work laid. The completion of the whole line was hopefully looked for by the ensuing freshes. Owing to a fresh outbreak of fever, however, 400 out of 1,000 coolies were lost to the works, and the sub-engineer himself had been twice laid up with many of his best men.

Third Barrier Tramway.—Three miles of earth-work finished; timber being collected; 600 coolies, besides carpenters, employed, and boats in progress.

Bombay Canal Projects.

The following projects of canals submitted by the Government of Bombay were sanctioned:—

A canal from Sukkur to Thadapoor, 63 miles long, on the right bank of the Indus, estimated to cost 7,29,820 rupees.

Improvement of the navigation of the Indus by cutting away the right bank, and thus widening the channel between Bukkur and Sukkur. Estimate, 2,05,985 rupees.

The Indus Tunnel at Attock.

At the close of the year it appeared that the drift, at the rate of progress which had been already made, would require another nine or ten months to complete. The only doubtful part of the river had been crossed, and it was considered desirable to arrive at an early decision as to the future steps to be taken in reference to this work. Colonel Taylor had expressed the opinion that 12 lakhs might possibly be the cost. But having the figures of the former estimate in view, and the actual expense of the drift, and knowing the difficulty of such rock excavations, it is not easy to believe that the sum of 12 lakhs will nearly suffice to complete the tunnel as proposed, with its approaches and a double roadway and footway. Full information had been called for, in order that these financial doubts may be brought to an end as early as possible, and a determination arrived at as to what ultimate course shall be adopted, now that the engineering possibility of the tunnel has been established.

Breakwaters at Moorshedabad.

In 1856 the flood current of the Bhagiruttee River began to set against the bank at Jaffergunge, one of the quarters of the city of Moorshedabad, causing erosion of the bank to a very considerable extent. This again occurred in 1857, and many pucka houses, some temples, and much property disappeared in the river. Considerable alarm was felt for the ultimate safety of the Newab Nazim's Palace, and the stream threatened to cut away his ancestral burial-ground

In 1859 Mr. Armstrong, late Superintendent of Nuddea Rivers, proposed a plan for staying the destructive force of the floods. The original upright bank was sloped down by cutting from the top and filling in at the bottom the earth so obtained, and more was procured from a distance when necessary. Along the foot of the new slope double rows of strong bamboo stakings, consisting of piles from eight to 12 feet in length, were driven, each secured both in front and rear by two rows of longitudinal pieces. Behind these rows of bamboo piling a double sheeting of reed matting was placed, to keep from the toe of the fresh slope the sucking action of the water of the river at its first rise. The earth for the slope was well punned together, and the surface afterwards turfed.

From the toe of this bank, spurs consisting of double rows of bamboo staking were projected into the river in a down-stream direction, and at an angle with the slope of about 15 degrees. These spurs were built of bamboos driven two feet from centre to centre. The rows were three feet apart. The interior space was filled with fascines of jungle and coarse aquatic grass mingled with broken bricks. The uprights were connected and strengthened by double rows of bamboos laid longitudinally, and cross pieces every six feet were also put in to keep the spurs from spreading. They were carried out into the river to 10 feet of water, each overlapping the other by six or eight feet.

Breakwaters were also placed down the face of the slope. A five and a half or six-inch rope of the best quality was fastened to a tree, or a well-secured post at the top of the bank 10 or 15 feet from its edge, and passed down the face of the slope. This main rope should be well spun and tarred thoroughly.

It is secured at every 10 feet by bags filled with bricks or stones, which are connected with it by drop ropes six feet long, when on the face of the rope, and from four to six feet more than the depth of the water if placed in it. Besides these weighted bags, common native wooden anchors are fastened to the main rope at every 50 feet, by drop ropes from 10 to 20 feet long, as necessary.

To this main rope are attached every 18 inches, bamboos with all their branches on them; bundles of jungle are put between the bamboos, and well tied to the main rope. The whole appears like a thick fence of jungle and bamboos, except that it lies flat on the slope face.

On the salient points of the bank these breakwaters quite overlap each other. At other points there is a distance of from 25 to 40 feet between them.

When the river rose on these works, naturally the jungle and bamboos floated, but they were kept in their position by the anchors and bags of bricks, and waving to and fro with the strong flood stream of the river, they completely deadened its abrasive action, and caused a precipitation of the silt it held in suspension. The spurs prevented any cutting action of the toe of the slope, tipping off the current and deadening the velocity, consequently silting took place between each of them.

These spurs are most useful adjuncts to such a work as the one under notice; indeed they are at times indispensable, because the berm of the slope being protected from cutting, the upper part remains secure.

Watchful superintendence is very necessary for such operations when the water rises at the commencement of the rainy season, inasmuch as such filled-in banks being fresh, and the turfing also newly laid, considerable damage will be done to the slope if the rising waters are attended with any wind. Then the waves falling on the new turfing, quickly suck it off, and often doing so erode away large quantities of the newly-placed earth.

The best plan by far to prevent this, and a very simple one, is to place mats of bamboo or reed along the edge of the water. The mats should be 3½ or four feet wide, and about five feet long; 2½ feet of the mat should remain in the water, and 1½ over it.

The fall of the small waves is thus kept off the slope, and the cutting and sucking action is quite prevented. When the water rises, the mats are lifted and replaced higher up, accompanying the flood in fact as it uplifts.

The cost of such breakwaters depends of course a good deal on their construction, for where a violent stream flows, they will have to be put together very carefully indeed. The materials must all be of the best quality.

The more expensive breakwaters have cost 25 rupees per 100 lineal feet, and some of the second class have been constructed for *Rs.* 14. 8.

The works described above have proved thoroughly effective. Instead of any erosion, a good deposit of silt has taken place in the protected bank.

The foregoing, which has been abridged from Mr. Armstrong's Report, was circulated for information to the several Local Governments and administrations.

Flood in the Mohun Pass.

An accident of a serious nature occurred during the year in connexion with the raised causeway now under construction through the Mohun Pass, which forms part of the Roorkee and Dehra Road, and upon which many labourers from the famine districts found employment.

It having been found impracticable to carry the road along the sides of the pass, composed chiefly of a rugged and precipitous boulder formation, it was determined to construct a causeway across the middle of the broad bed of the watercourse which formed the old road. The causeway is protected by revetment walls of boulder masonry, and cribs and groynes of rough timber filled with stones. The pass has a fall of about 132 feet a mile, and heavy rain causes an immediate flood, which, under ordinary circumstances, reaches a height of about three feet.

On the 21st June 1861 there was unusually heavy rain, and three distinct floods occurred, one of which came down in a torrent six feet high, and at a speed that is estimated at 20 miles an hour. At many points the fresh masonry was breached, and many large gaps were made in the causeway, specially at the points where the torrent was directed transversely against it by the projecting spurs or bluffs of the hills. The damage measured by money is not estimated at more than 2,000 rupees, while it is not considered that the accident will, in any serious degree, affect the future usefulness of the road. The work is of a bold and unusual kind, and the flood has shown its weak points.

It is to be added, however, with regret, that the accident was accompanied by serious loss of life. About 16,000 persons were employed on the work, of whom 40, who had not time to escape, are reported to have perished. This loss is very lamentable, though it is small in comparison with the number of people who were encamped in the pass, and with the loss alleged in the first rumours that reached Calcutta.

It is part of the design to remove the projecting bluffs that turn the water against the causeway, and a company of sappers has been employed on the work, but weak in numerical strength, they have not been able to keep pace with the progress of the roadway.

RAILWAYS.

The Public Works Budgets and Progress Reports of the several railways must be referred to for the details of railway expenditure and railway progress. It will be sufficient to give here the statement annexed, as Appendix (C).

Railway Accidents.

The usual return of railway accidents will be found in Appendix (D).

Railway Expenditure.

The estimates of expenditure of railway capital in India for the entire financial year 1861-62 were carefully scrutinised, and the general results, as shown in the following statement, were arrived at:—

NAMES of RAILWAYS.	Amount of Estimates for entire Year, 1861-62.			
	As made by Railway Authorities, as below.		As Corrected in Public Works Department for	
	3rd Quarter.	4th Quarter.	3rd Quarter.	4th Quarter.
	Rs.	*Rs.*	*Rs.*	*Rs.*
Madras Railway, South Western Line - - -	36,31,300	43,91,432	36,31,300	43,91,432
,, ,, North ,, ,, - - -	18,35,600	10,75,468	17,95,100	10,75,468
Great Southern of India - - - - -	10,41,984	11,06,404	10,41,984	11,06,404
Great Indian Peninsula - - - - -	148,92,404	148,63,817	135,37,564	145,66,817
Bombay, Baroda, and Central India - - -	53,58,944	58,91,851	62,42,098	60,00,000
Sind Railway and Indus Flotilla - - - -	16,79,433	18,93,115	16,79,433	18,93,115
East India Railway, east of the Kurrumnassa -	196,45,268	177,16,780	198,23,929	180,00,000
,, ,, West of the Kurrumnassa -	75,22,400	52,00,637	50,00,000	40,00,000
,, ,, Jubbulpoor Line - - -			6,00,000	5,00,000
Eastern Bengal - - - - - - -	35,00,000	24,78,808	28,00,000	23,00,000
Calcutta and South Eastern - - - -	8,00,000	10,04,485	8,00,000	9,00,000
Punjab Railway - - - - - - -	19,89,350	20,68,064	17,00,000	20,00,000
Total - - -	618,96,683	576,90,861	586,51,408	567,33,236

The total expenditure, as estimated by the railway authorities, fell successively from 671,79,212 rupees to 663,15,922 rupees, then to 618,96,683 rupees, and finally to 576,90,861 rupees; whereas the Government of India, as early as February 1861, was led to form the opinion that 600,00,000 rupees would be sufficient, and adopted the successive estimates of 585,03,290 rupees and 586,51,408 rupees.

Opening of Railways.

The subjoined statement will show the portions of railways that were opened or expected to be opened during the year under notice:—

NAMES of RAILWAYS.	Opened on 1st January 1861.	Opened between January and June 1861.	Expected to be opened before January 1862.	Total opened in 1861.	Expected to be opened in 1862.	Remaining to complete the Line now sanctioned.
	Miles.	*Miles.*	*Miles.*	*Miles.*	*Miles.*	*Miles.*
Madras North Western line, Areemun to Moodgul.	- -	- -	- -	26½	- -	300½
South Western line, Madras to Reypoor -	- -	- -	- -	259	- -	146
Branch, South Western line, Jalarapett to Bangalore.	- -	- -	- -	- -	- -	84
Great Southern of India Railway - -	- -	- -	- -	48	- -	30½
Great Indian Peninsula Railway - -	298	53	86	139	86	730
Bombay, Baroda, and Central India Railway	36	73	30	103	100	71
Sind Railway - - - - - - -	- -	108	- -	108	6	—
East India Railway, Bengal Division - -	248	- -	110	358	214	—
,, ,, North Western Provinces	122	- -	120	242	173	144
Eastern Bengal Railway - - - - -	- -	- -	- -	- -	109½	—
Calcutta and South Eastern Railway - -	- -	- -	- -	- -	28½	—
Between Lahore and Umritsur - - -	- -	- -	- -	- -	32	—
Between Mooltan and Shershah, the terminus for steamers, &c., on the Chenab.	- -	- -	- -	- -	10½	208

Light Railways.

During the year Mr. Wilson's scheme of light railways has been under consideration. It is regarded by Government as a very desirable one, and every encouragement that could be given under the circumstances has been afforded to it. The nature and details of Mr. Wilson's scheme have already received publicity and need not here be more particularly adverted to.

East Indian Railway Agency.

A good deal of correspondence has taken place between the East Indian Railway Board, Her Majesty's Secretary of State, and the Government, on the subject of the proposed constitution of the Indian Agency of the East Indian Railway Company.

The proposition made by the London Board was to the effect that the entire business of the agency should be conducted by a Board of officers, consisting of the chief agent, the chief engineer, the present deputy agent in the north west, and the locomotive superintendent, and probably also the traffic manager; and that with this Board should be associated an officer of the Government competent to deal with such matters as require the concurrence of the Government. The chief agent, if supported by the Government officer, should have authority to overrule his colleagues, and all the correspondence with the Government should be conducted with the chief agent, whose proceedings in most cases would be founded upon the decisions of the Board collectively, concurred in at the time by the officer of the Government. The functions of the proposed Board were in short to a great extent analogous to those exercised by the Home Board of Directors.

The agent of the Company in April last submitted a proposal for a committee of management, consisting of the agent, of the chief engineer, of two deputy agents whom it was proposed to constitute in charge of the financial and general branches of the agency, and of the consulting engineer to Government. To this Board Mr. Palmer's plan contemplated the appointment of a secretary.

The late Lieutenant Governor of Bengal, however, disapproved of the proposal to have a Board of Management. He failed to perceive how the creation of such a Board would lighten the work or help the agent to dispose of it more rapidly. The real help to be given, in his Honour's opinion, should be in the shape of confidential and competent *aids.* But he thought free consultation with the chief officers very desirable, and would have periodical meetings at which they should attend to give explanations, and that at these the Government consulting engineer should be present. But his Honour would have no Board of Members with votes.

The Lieutenant Governor of the North Western Provinces gave no opinion, but forwarded a memorandum from his consulting engineer. That officer strongly objected to the proposed Board of Management.

The Governor General in Council generally agreed with the view taken by the late Lieutenant Governor of Bengal, that the Board should be purely consultative, and without votes; but that it should be made a rule that proposals of importance be brought forward in writing, and at these Boards, weekly or half-weekly, and there discussed, though the decision should rest with the agent, subject to the consulting engineer's assent. The latter should retain the large discretionary powers he has now of acting at once; but he should, of course, have the power to demand time either for consideration and further information, or to refer a question actually to Government.

The Government of India have recommended also that a Consultative Board, similar to that proposed for Calcutta, be established at Allahabad, so long at least as construction is in progress. It would embrace the deputy agent, the chief engineer, and the consulting engineer to Government, and would dispose of all business now disposed of there.

Indigenous Railway Engine Drivers.

The following Circular, which will explain itself, was issued from the Public Works Department in April 1861, on the subject of engineers for Indian railways:—

Madras, No. 434, dated 23d July 1860.
„ „ 113, „ 19th Feb. 1861.
Bombay, No. 1258, „ 2d Oct. 1860.
N. W. P., „ 316 „ 13th Sept. „
Punjab, „ 395-372, dated 19th Sept. 1860.

"The Governor General in Council has lately had under consideration the letters noted in the margin, regarding the best plan of maintaining a staff of engine drivers on Indian railways, and on the available sources of skilled mechanical labour generally. These letters are replies to a circular issued by the Government of India, with reference, to an extract[*] from a narrative of the proceedings of the Lieutenant Governor of Bengal, in which fears were expressed that unless some efficient means were adopted, there would be a break-down in the working of the Indian Railways.

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[*] "In referring to the difficulty already experienced in keeping up the staff of European engine drivers on the portion of the line which is now open, you have touched upon a question of great moment, not only to the East Indian Railway, but also to all railways in India. The Lieutenant Governor is quite sure that there will be a great break-down hereafter, unless some large and well-considered plan of rearing men in India as engine drivers, to perform part of the driving business, is acted upon; and already too little time remains for the development of any such plan. The Lieutenant Governor begs that you will enter into personal communication with the railway officers, and endeavour to induce them to organise a system with this object. A workshop school for promising Eurasian lads would, probably, the Lieutenant Governor thinks, be the best means of rearing men of the sort required. After learning all that could be learned in such a school, the young men might be put out as assistants to engine drivers. The expense of the training school would, the Lieutenant Governor thinks, be well repaid."

"The Report by the officers of the Madras Railway is worthy of special attention.

"It is the earnest desire of the Government of India, and it has been the often-repeated wish of Her Majesty's Government, that the utmost use should be made of local labour in all departments of the railways, wherever it may be practicable. And it should be impressed on the officers of railways, that the Government of India will consider exertion in this direction a material point when called upon to support or sanction recommendations for promotion or advancement of salary. The railway companies will be furnished with copies of the papers on which this resolution is based.

"The letter from the Bombay Government states, that the plan adopted by the Pasha of Egypt to raise a staff of engine-drivers, has been found eminently successful. This was to allow a premium of 100 *l.* for every trained Egyptian driver turned out. The Governor General in Council is of opinion that the payment of a premium to the locomotive superintendent for every driver trained by him and employed in that capacity on the line, would produce all the drivers required. Probably the locomotive superintendent of the Madras Railway would be able, without detriment to the interests of his own railway, to supply trained drivers to other lines. If so, he might be allowed a premium for every one who after trial, should be employed on another line."

The Guarantee System.

In November 1858, the Governor General in Council recorded his opinion on the general question of Government guarantee for the execution of public works by private enterprise.

On an application for the extension of the guaranteed capital to one of the existing railway companies during 1860, the late financial member of Council, the Honourable Mr. Laing, and the late Lieutenant Governor of Bengal, took occasion to record their respective views on the whole guarantee system, and the subject thus once more came under review by the Government of India.

His Excellency Sir William Denison, who happened to be in Calcutta at the time, at the request of the Governor General also wrote some remarks on the subject.

The conclusion arrived at by the Government of India on the general question was, that the system has been a most costly one, and that the control over expenditure has been insufficient, owing to practical difficulties in its exercise, and to the fact that there can be no real control where there is no direct authority over the staff, extending to dismissal if necessary.

But the Government of India did not subscribe to the view that the system of constructing public works in India through the agency of foreign companies, with money raised virtually by an absolute guarantee, had proved a failure.

Without affirming that the works of the East Indian Railway might not have advanced more rapidly, and with a strong conviction that they might have been completed at less cost, the great results that have been achieved during the last 10 years, both here and in other parts of India, cannot but be seen with satisfaction—results which it was believed would not have been achieved so fully without the guarantee.

The guarantee, however, might have been fenced by such conditions as should have avoided the more serious evils which have been complained of. Little doubt was felt that the intervention of a company causes the greatest complexity, that the system of companies with an absolute guarantee should not be extended, and that it ought to be discontinued when it can be done consistently with good faith under existing contracts. Difficulties which existed 10 or 12 years ago, in raising money directly on account of the Indian Government in England, exist no longer; and there appears no sufficient reason why, by the aid of lump-contracts for construction and stocking, all the real advantages of the guarantee system might not be attained without its complications, should it continue impracticable to obtain funds for works of the kind without Government intervention.

APPENDICES.

Appendix (A).

Budget Rules.

In consequence of instructions received from Her Majesty's Secretary of State for India, the following rules are issued by the Governor General in Council, in supersession of all previous orders on the subject of the preparation of the Public Works Budgets and the sanction of projects; particularly those contained in Section E. of the Report on Classification of Public Works Expenditure, circulated for guidance on 30th June 1858 (*see* also Appendix to Public Works Code, pp. 21 to 39) and in Extract Proceedings of the Governor General in Council, dated 22d September 1860, No. $\frac{4945}{4957}$:—

1. It is a fundamental rule that no proposal for the execution of Public Works shall be

definitely sanctioned by any authority whatever unless it be accompanied by a properly detailed design and estimate.

2. A strict adherence to this maxim is an implied condition in the delegation of all authority to sanction expenditure. In cases only of real emergency, immediately reported, and duly explained to the next superior authority, may this injunction be allowed to be infringed upon, excepting in certain classes of petty works or contingencies, for which special rules are provided.

A *revised* estimate is to be understood as a new estimate, which it has been found necessary to substitute for the original, from alterations in the design or in the rates or requisite quantities of work.

A *supplementary* estimate is to be understood as an additional estimate for any extension of the first design, or any alteration involving increase of expenditure.

3. The total amount which can be devoted to Public Works from the Imperial Revenues is decided annually by the Government of India in the Financial Department.

From this total are then set aside the following items:—

1st. Estimated expenditure of the electric telegraph in construction and repairs.

2d. Estimated expenditure of Government money on account of guaranteed companies.

3d. A reserve, to be at the disposal of the Government of India, both to meet miscellaneous demands which do not enter into the estimates of any Local Government,* and to supply a fund for additions to the assignments of Local Governments, should obvious necessity for such additions arise during the year.

The balance of the total amount decided on in the Financial Department will then be allotted to the different Governments and Administrations, by the Government of India in the Public Works Department, for expenditure on Public Works during the ensuing year.

4. The *Public Works Budget* of India is the annual programme and aggregate of estimates of expenditure proposed on Public Works for each part of the British territory, as exhibited in the Budgets of the different Local Governments after these have been reviewed and sanctioned by the Government of India.

It is to be clearly understood that the Budget is to exhibit the entire estimated expenditure on Public Works in each Government or Province, whether under the immediate control of the Engineer Department, or of other branches of the Administration.

The first object of the Public Works' Budgets is of course that of the Budgets of all Departments: they limit the amount of funds to be expended during the year, and prescribe how the money is to be spent.

But, in their submission to the sanction of the Government of India, they are likewise intended to insure, on the part of all the Governments concerned, some unity and consistency of action in meeting the wants of the country, and also the exercise of foresight and consideration of the claims of different works, where (in the case of the larger Governments at least) the demands may be viewed as virtually unlimited, and the supplies to meet them as limited very rigidly.

The Budgets also enable the Government of India to review the comparative necessities of different portions of the Empire, and to guide the distribution of funds to these out of the general assignment to Public Works.

5. The expenditure of the Public Works Department may be most simply divided into—

1st. Expenditure on original works.

2d. Expenditure on repairs.

3d. Expenditure on establishments.

6. Under the head of Original Works are included all new constructions, and all restorations of works fallen into such decay as to be disused.

7. *Repairs* may be divided naturally into two principal sections: First, *Current Repairs*, including all the usual periodical repairs of works and buildings maintained at the charge of Government. In this class of repairs a fair approximation to the outlay actually required can always be given from experience. Secondly, *Special Repairs*, the demand for which arises from unforeseen casualties, such as fires or floods, or from the effects of time beyond what is provided for by current repairs. For these no estimate, properly speaking, can be formed, but a sum may be set apart, fixed on the average of past years.

8. There are in some territories certain constant charges for people kept up at bridges of boats, ferries, and the like. These *maintenance* charges, being for actual work, and not for the superintendence of work, belong more properly to the nature of repairs than to that of establishments, as understood in this Department.

9. *Establishments.*—This head of estimate includes all regular salaries to public servants employed in the Department in the direction and superintendence of works, or in offices subsidiary to that superintendence, and whose pay is not provided for in the estimates of the cost of the works: all sanctioned travelling allowances to such public

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* The term "Local Government" in these rules is intended to embrace the minor Administrations unless otherwise specified.

servants; and likewise all *contingencies*, or charges of a miscellaneous nature, subsidiary to the performance of the duties of the establishment.

10. The powers of the Local Governments to sanction establishments are very strictly limited by the rules of the Financial Department for the time being, which it is not necessary to recapitulate here.

11. The powers of the Local Governments to sanction *bonâ fide* repairs are restricted only by the limits assigned to that object in the year's Budget.

12. The powers of different Governments and Administrations to sanction original works will in future be regulated by the following rules*:—

	Rs.
The Governments of Madras and Bombay may, of their own authority, sanction works the estimated cost of which does not exceed - - - - - - - - - - - -	2,00,000
The Lieutenant Governors of Bengal, the North Western Provinces, and the Punjab, works not exceeding - - - -	50,000
The Heads of the Administrations of Oudh, Pegu, Sindh, and of Mysore - - - - - - - - - - - - -	10,000
The Heads of the Administrations of Nagpoer, the Tenasserim Provinces, Hyderabad Districts, and Straits Settlements - -	5,000

13. Any project the estimate of which exceeds these limits will require the sanction of the Government of India. So also will all projects, large or small, which affect the interests of more than one Local Administration; all projects connected with the choice of permanent stations for troops,† or for providing permanent accommodation for a larger force than is at present quartered at a station; and all projects of fortification estimated to cost more than 50,000 rupees.

14. Projects which are essentially incomplete without extensions, which would exceed the powers of the Local Governments, must not be sanctioned by the latter.

15. All Local Administrations are authorised to pass supplementary or revised estimates for works, the original estimate of which was beyond their powers, when these do not involve an additional charge of more than 10 per cent. on the original estimate, the sanction being specially reported to the Government of India. In any case of a work, however, originally sanctioned, in which the additional charge exceeds one-tenth of the maximum amount which the Local Administration has power to sanction, reference must be made to the Government of India.

16. Projects the cost of which is estimated to exceed 10 lakhs of rupees, or which, as in the case of docks and harbour improvements, are attended with more than ordinary engineering difficulties, must, after receiving the provisional sanction of the Government of India, be submitted for the approval of the Secretary of State in Council.‡

17. Projects requiring the sanction of the Government of India may be sent up by the Local Governments at any time of the year; but, as a rule, no project will be admitted in the Budget unless it has come before the Government of India with proper estimates, &c. previous to the 31st of March.

18. *It is to be distinctly understood that the mere sanction of an estimate by the Government of India conveys no authority for the expenditure of money on the work, except as it may have been provided for in the Budget.* In fact, the admission of an estimate into the list of projects sanctioned is entirely distinct from the provision for its execution in any specific year.

19. It will be competent for the Government of India, in dealing with the Budgets of the Local Governments, to suspend the execution of any project whatsoever concerning which it may not be satisfied. It may also, on sufficient grounds, direct the application of the money saved by such suspension to works of imperial importance, which appear to it to have been insufficiently provided for.

In the event of a continued difference of opinion on any point between the Government of India and that of Madras or of Bombay, the latter Governments may claim a reference to the Secretary of State in Council; but on any proposal of the other Administrations, the veto of the Government of India will be absolute.

20. The Government of India may also, should it see fit, require a diminution of the proposed cost of establishments.

21. The nature of the case renders it impossible that the programme of expenditure laid down in the Budgets of the Department of Public Works should be as rigidly adhered to as it may be in most other departments of public expenditure; but the Reserve or Unappropriated Fund, provided for in the rules which follow, affords a margin for unforeseen requirements, and so facilitates a reasonably close adherence to the programme. This adherence will be expected.

22. But with this clearly understood, the Local Governments will have the power, on good grounds, to alter the apportionment of funds to original works sanctioned by themselves, or to suspend sanction to such works and to undertake others, or to devote the

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* Secretary of State's letter No. 8, of 24th January 1861.

† Secretary of State' letter No. 8, of 24th January 1861.

‡ Secretary of State' letter No. 8, of 24t January 1861.

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funds saved to the more vigorous prosecution of works sanctioned by higher authority; provided such changes of appropriation are not in contravention of any positive instructions from the Government of India, and are distinctly brought under its notice in the Weekly Abstracts of Proceedings.

23. The Local Governments will not be at liberty to suspend or reduce the allotment of funds to works which required or have received the sanction of higher authority, without the permission of the Government of India.

24. The Local Governments will have no authority to increase the expenditure on repairs, otherwise than by a reduction of the expenditure on establishments, or by a grant out of the reserve. If any unforeseen circumstances (such as the occurrence of floods of unusual extent or severity) should render an increase of expenditure on repairs necessary, to an extent not to be met from the reserve or establishment estimates, the Government of India must be applied to for sanction to a change of appropriation. Any saving on repairs will be at the disposal of the Local Governments to devote to original works. Such acts need not be reported, except as they will appear in the Annual Progress Report.

25. The four preceding paragraphs (21—24) will be held to supersede, in their application to this Department, the rule (1st) laid down in the Resolution of the Government of India in the Financial Department, No. 11,322, as published in the "Calcutta Gazette" of 24 November 1860, paragraph 21*.

26. In preparing the budgets for the coming year, the Local Governments will base their estimates provisionally on the limits assigned for the year then current, unless they shall have received an intimation of a change in the amount by the 1st of October.

27. The Budgets of every Local Government must reach the office of the Secretary to the Government of India in the Public Works Department by the 1st of February.

The Government of India, in the Financial Department, will then finally determine what assignment of money can be made, either in excess or in deficit of those assumptions on which the Budgets have been based. As a general rule, it will be left to the Local Governments to deal with this excess or deficit, by increasing or diminishing, at their discretion, the amounts assigned to sanctioned works. But the Government of India, in such circumstances, may exercise the rights reserved to it in paragraphs 19 and 20.

28. The amount of the assignment to any Local Government is the limit of the issues of cash from the State treasuries to the Department.

The transfer of stores from another department is to be regarded as an issue of cash from a State treasury.

29. The Budget of each Local Government will be accompanied by a letter, reviewing the appropriation of funds in the Budget, affording explanation and comment on the more important items, and bringing to the notice of the Government of India any particulars which cannot be conveniently embodied in the Budget forms.

30. The Budgets to be henceforth submitted will consist of four parts:—

31. Part I. will exhibit the expenditure on all original works sanctioned by competent authority, whether uncommenced or in progress, unless they be lower than 1,000 rupees in total cost, under the authorised classification.

This Part may also contain entries of works which the Local Governments expect to sanction at an early date, subject to the fundamental condition of Rule I. of this paper; and it may contain entries of works about to be submitted to the Government of India, *subject to the condition contained in Rule* 17.

32. The column of remarks must contain a brief but clear reference to the circumstances of each entry, as regards the authority and date of sanction, or of submission for sanction, of the estimate, so as to show at once whether an estimate has yet been considered.

33. The cost of stores indented for on England, to the extent to which the expense will have to be met by the Home Government during the year, as well as it can be estimated, must be included in Part I. of the Budget, and the amount regarded as an item of expenditure out of the assignment of the year. These amounts will be brought under observation by a note in the column of remarks.

It is to be understood that all such expenditure is to be included in the estimates of the works in aid of which the indent is made, the amount being estimated approximately when accurate data do not exist.

34. Part II. will exhibit the proposed expenditure on repairs and maintenance in every division or district, under the general heads of the authorised classification, divided also into *current repairs, special repairs*, and (where necessary) *maintenance*. (*See* paragraph 8.)

35. Part III will exhibit the cost of establishments, divided into *direction* (including the chief engineer with his establishment, superintending engineers with their establishments, and the central control of accounts), *construction* (including executive establishment

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* Viz., "that any alteration in the distribution of the charges of a Department be at once reported, with all details, as at present, to the Government of India."

and offices), and (where required) *collection and police.** It will show the establishment of each circle of superintendency, and of each executive division or district separately. The establishment estimate will embrace military allowances debitable to the Public Works Department by whatever channel they may be disbursed.

36. Part IV. or *the Abstract* will be in two forms, A and B. A, the classified Abstract, will exhibit the whole of the expenditure under the three preceding parts, aggregated under the authorised classification. B, the local Abstract, will exhibit the totals of expenditure under each executive charge or other disbursing office, under the heads of original works, repairs, and establishments. This is an important form, as showing the relative proportions of these in each charge.

37. The reserve or unappropriated fund will also appear in the Abstracts, and there only, as one sum equal to one-tenth of the *whole* assignment.

38. This reserve will cover all items the entire cost of which is under 1,000 rupees, and will also be available, at the discretion of the Local Governments, to meet all other expenditure otherwise unprovided for, whether on new works which they may see cause to commence during the year, in additional grants to works in progress, or in additional grants to repairs. (*See* paragraph 24.) It may also be devoted to the employment of additional establishment, subject to the financial rules in force on that matter. The application of the reserve at the absolute discretion of the Local Governments will be restricted only by those rules, and by the spirit of such instructions as the Government of India may issue from time to time. For example, if the Government of India were to object [as it lately did] to the large proportion of expenditure proposed in the Budgets for military works or for unproductive civil works, and the Local Government were, without reference, to make large additions out of the reserve to the appropriations to such works, this would be a censurable use of the reserve.

39. Forms will be appended to this paper for guidance. The Budget, and the letter transmitting it, should always be submitted in print where this is attainable. And it is desired that the size and type of these forms may be followed as closely as may be. The large sheets adopted in some Budgets and the small type adopted in others are equally inconvenient. There is no objection to *greater* detail, as in the repairs statement of the Madras and North Western Provinces Budgets; but what is wanted by the Government of India is shown here, and it is requested that it may be given in these forms.

It is to be understood that where any portion of the forms or headings is inapplicable, that portion of the forms is to be omitted altogether, and not sent up in blank.

40. The preceding rules (31—39) refer to the estimates of the Public Works Department *proper,* to be met out of the allotment referred to in paragraph 3.

41. The Budget of Expenditure on account of guaranteed enterprise will form a separate document. It will exhibit—

1st.—Expenditure by the State;

A. On establishments for control and for the settlement of transfers of land.

B. On the purchase of land.

Where the sums under the last section are large, the objects should be briefly indicated.

2d.—Disbursements chargeable to guaranteed capital.

42. The Budget of Local Funds will also be separate from the Budget of Imperial Public Works, and will be arranged under similar parts *so far as they may be applicable.* The object of this Budget is the useful information which it affords as to an important part of the whole field of public improvement, as well as the exercise of foresight which it induces. But interference with the authority of the Local Governments over this expenditure is not implied in the call for a Budget.

43. By late orders in the Military Department, the manufacture and repair of barrack furniture for the troops in the provinces of the Bengal Presidency has again devolved upon this Department. An estimate of the total expenditure under the heads of manufacture and repair of furniture must be submitted along with the Budgets of the Department; but it will be a separate document, and the amount will not be chargeable to the Public Works assignment.

44. The Budget will be accompanied by an extract of the estimate submitted to the Financial Department for the same year; which extract will contain all the Public Works anticipated receipts and charges, and should show an intended outlay exactly corresponding to the Public Works Department Budget.

There should also be accounts of the estimated balances and income and expenditure of each of the local funds for the coming year.

45. The classification to be adopted in the Budgets of the Department has been

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* These are peculiar to certain divisions in the Irrigation Department, and to divisions with tolls, &c.

Chap. VIII.
Public Works.

slightly modified, to fit better into the division of the General Budget, and will in future be as follows:—

Class.	Departments.	Subdivisions.	
I. Military	A. Army	1. Fortifications. 2. Cantonments. 3. Accommodation for troops. 4. Ordnance. 5. Commissariat. 6. Stud. 7. Staff.	
	B. Navy	*No subdivision.*	
II. Civil Administration	C. Revenue	1. Land and miscellaneous. 2. Customs. 3. Salt. 4. Opium. 5. Post office.	
	D. General	1. Government houses and residencies. 2. Public departments. 3. Scientific institutions. 4. Charitable institutions. 5. Monuments and antiquities. 6. Miscellaneous.	These four departments correspond to the section "Civil Buildings" of the General Budget.
	E. Ecclesiastical	1. Churches and other buildings. 2. Burying-grounds.	
	F. Educational	*No subdivision.*	
	G. Industry	1. Police. 2. Court-houses. 3. Gaols.	
III. Public Improvement	H. Municipal	1. Town buildings. 2. Markets. 3. Paving and streets. 4. Lighting. 5. Water supply. 6. Sewage.	
	I. Marine	1. Harbours and Navigation. 2. Lighthouses.	
	J. Industrial	1. Mines. 2. Manufactures.	
	K. Agricultural	1. Irrigation canals. 2. Tanks. 3. Dykes. 4. Drainage. 5. Forests.	
	L. Communications	1. Metalled roads. 2. Unmetalled roads. 3. Bridges. 4. Boat bridges and ferries. 5. Navigable canals. 6. River improvements. 7. Accommodation for travellers. 8. Railways.*	
	M. Telegraph†	*No subdivision.*	

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* This is intended for any railways or tramways made by Government; it has nothing to do with *guaranteed enterprise.*

† In General Budget, this is under "Revenue."

By order,
H. Yule, Lieutenant Colonel,
Secretary to the Government of India.

Fort William,
Public Works Department,
27 July 1861.

(Pattern..)

Government of Bengal.—Public Works Budget for 186*-6*.

Part I.—Original Works.

Subdivision in Classification.	Executive Divisions or Districts, or other Disbursing Departments.	PROJECTS.		Amount of Estimate.	Computed Expenditure up to 30th April 1862.	Amount required for Expenditure in 1862-63.	REMARKS AND REFERENCES.
		Number.	Description and Locality.				
			I. MILITARY.	*Rs.*	*Rs.*	*Rs*	
			A.—Army:				
Accommodation for troops.	Barrackpoor -	1	Barracks for half a European regiment at Barrackpoor	3,50,000	2,00,000	1,50,000	Sanctioned by Government of India in orders on Budget for 1860-61.
			Total Accommodation for Troops	—	—	—	
Ordnance -	Fort William -	2	Lightning conductors to magazines	10,000	4,000	6,000	Estimate sanctioned by Lieutenant Governor on 10 December 1861.
			Total Ordnance	—	—	—	
			Total Army	3,60,000	2,04,000	1,56,000	
			B.—Navy:				
	Presidency -	3	Fitting-shops and store-rooms in the Naval Steam Yard at Kidderpoor	1,00,000	- -	50,000	Plan and Estimate submitted to Government of India, with Letter No. dated 1861, and approved in P. W. D. letter, No. dated .
			Total Navy	1,00,000	- -	50,000	
			Total Military - - Rs.	4,60,000	2,04,000	2,06,000	
			II. CIVIL ADMINISTRATION.				
			E.—Ecclesiastical:				
Churches and other buildings.	Barrackpoor -	4	Church for the troops at Barrackpoor	1,00,000	- -	50,000	Plan and Estimate received. They will be submitted to Government of India in a few days.
			Total Churches	—	—	—	
Burying-grounds	Dinapoor -	5	Burying-ground at Dinapoor	5,000	- -	5,000	Sanctioned by Lieutenant Governor on 2 January 1862.
			Total Burying-grounds	—	—	—	
			Total Ecclesiastical	1,05,000	- -	55,000	
			G.—Judicial:				
Court-houses -	Dinapoor -	6	New cutcherry for the Judge at Chuprah	15,000	- -	15,000	Sanctioned by Lieutenant Governor on the 1861, on Plan and Estimate.
			Total Court-houses	—	—	—	
Gaols - -	Upper Assam	7	Gaol at Debrooghur	40,000	20,000	20,000	*Vide* Budget of 1860-61, No. 35.
			Total Gaols	—	—	—	
			Total Judicial	55,000	20,000	35,000	
			Total Civil Administration - - Rs.	1,60,000	20,000	90,000	

Part I.—Original Works—*continued.*

Subdivision in Classification.	Executive Divisions or Districts, or other Disbursing Departments.	PROJECTS. Number.	PROJECTS. Description and Locality.	Amount of Estimate.	Computed Expenditure up to 30th April 1862.	Amount required for Expenditure in 1862-63.	REMARKS AND REFERENCES.
			III. PUBLIC IMPROVEMENT.	*Rs.*	*Rs.*	*Rs.*	
			K.—Agricultural:				
Dykes -	Hidgellee -	8	New embankments between Hidgellee and Rusalpoor Rivers - - - - -	1,00,000	50,000	50,000	Sanctioned by Government of India, in letter No. , dated 1861, on Plan and Estimate.
	Tumlook -	9	25 Sluices on Roopnarain - - - -	40,000	- -	20,000	Estimate approved by Lieutenant Governor, on 10 October 1861.
			Total Dykes - - - - - - -	—	—	—	
			Total Agricultural - - -	1,40,000	50,000	70,000	
			L.—Communications.				
Metalled roads	Berhampoor -	10	Road from Jeeagunge to Nulhatty - -	2,50,000	1,00,000	1,50,000	*Vide* Orders on Budget of 1860-61.
			Total Metalled Roads - - -	—	—	—	
Bridges - -	1st division Grand Trunk Road.	11	Bridge of 10 masonry arches, and nine spans of iron girders across the Eastern Burrakur	5,00,000	1,00,000	3,00,000	*Vide* Orders on Budget for 1859-60. The work is expected to be completed next year.
			Total Bridges - - - - - -	—	—	—	
			Total Communications - - -	7,50,000	2,00,000	4,50,000	
			Total Public Improvement -	8,90 000	2,50,000	5,20,000	
			GRAND TOTAL - - - -	15,10,000	4,74,000	8,16,000	

[Pattern.]

Government of Bengal.—Public Works Budget for 186*—6*.

Part II.—Repairs.

Description of Repairs.	Executive Divisions or Districts.	Military. Army.	Military. Navy.	Military. Total.	Civil Administration. Revenue.	Civil Administration. General.	Civil Administration. Ecclesiastical.	Civil Administration. Educational.	Civil Administration. Judicial.	Civil Administration. Total.	Public Improvement. Municipal.	Public Improvement. Marine.	Public Improvement. Agricultural.	Public Improvement. Communications.	Public Improvement. Electric Telegraph.	Public Improvement. Total.	Grand Total.
		Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Current Repairs - -	Presidency - - - Dinapoor - - - Burdwan - - - Etc. - - - -																
	Total - - -																
Special Repairs - -	Dinapoor - - - Midnapoor - - - Burdwan - - - Upper Assam - - Etc. - - - -																
	Total - - -																
Maintenance of Boat, Bridges, Ferries, &c. -	1st Division, G. T. Road 2d - ditto - - ditto - Etc. - - - -																
	Total - - -																
																Total Repairs - - -	

[Pattern.]

GOVERNMENT OF BENGAL.—PUBLIC WORKS BUDGET FOR 186*—6*.

PART III.—ESTABLISHMENTS.

Disbursing Department, Office, or Division.	(A.) REGULAR ESTABLISHMENTS.								(A.) Total, Regular Establishment.	(B.) Extra Establishment.	(C.) Contingencies.	Grand Total.
	DIRECTION.			CONSTRUCTION.				Collection and Police.				
	Fixed Salaries.	Travelling Allowances.	Total.	SALARIES.		Travelling Allowances.	Total.					
				Engineering.	Office.							
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Secretariat - - - - - -	000		000						000		000	000
Chief Engineer's Office - - -	000	000	000						000		000	000
Controller's Office - - - -	000		000						000	000	000	000
Superintending Engineer, Presidency Circle - - - - -	000	000	000						000		000	000
Ditto, Burdwan Circle - - -	00	000	000									
Civil Architect - - - - -				000	000	000	000		000	000	000	000
Garrison Engineer - - - -				00	00	000	000		000		000	000
Dacca Division - - - -				000	000	000	000		000		000	000
Patna Division - - - -				000	000	000	000		000	000	00	000
2d Division, G. T. Road - - -				000	000	000	000	00	000		00	000
Hidgellee Division - - - -				000	000	000	000	00	000		00	000
Etc. - - - - - -												
TOTAL - - - *Rs.*												

[Pattern.]

GOVERNMENT OF BENGAL.—PUBLIC WORKS BUDGET FOR 186*—6*.

PART IV.—(A.) CLASSIFIED ABSTRACT.

CLASSIFICATION.		Works.	Repairs.	TOTAL.
I.—MILITARY.		*Rs.*	*Rs.*	*Rs.*
A.—ARMY - -	Fortifications - - - -			
	Cantonments - - - -			
	Accommodation for Troops - -			
	Ordnance - - - - -			
	Commissariat - - - -			
	Stud - - - - - -			
	Staff - - - - - -			
	Total Army - - -			
B.—NAVY - - - - - - - - - -				
	Total Navy - - -			
	TOTAL MILITARY - - -			

Part IV.—(A.) Classified Abstract—*continued.*

Classification.		Works.	Repairs.	Total.
II.—CIVIL ADMINISTRATION.		*Rs.*	*Rs.*	*Rs.*
C.—Revenue	Land and Miscellaneous			
	Customs			
	Salt			
	Opium			
	Post Office			
	Total Revenue			
D.—General	Government Houses and Residencies			
	Public Departments			
	Scientific Institutions			
	Charitable Institutions			
	Monuments and Antiquities			
	Miscellaneous			
	Total General			
E.—Ecclesiastical	Churches and other Buildings			
	Burial Grounds			
	Total Ecclesiastical			
F.—Educational				
	Total Educational			
G.—Judicial	Police			
	Court Houses			
	Gaols			
	Total Judicial			
	Total Civil Administration			
III.—PUBLIC IMPROVEMENT.				
H.—Municipal	Town Buildings			
	Markets			
	Paving and Streets			
	Lighting			
	Water Supply			
	Sewage			
	Total Municipal			

Part IV.—(A.) Classified Abstract—*continued.*

CLASSIFICATION.		Works.	Repairs.	TOTAL.
		Rs.	*Rs.*	*Rs.*
III.—PUBLIC IMPROVEMENT—*continued.*				
I.—MARINE	Harbours and Navigation			
	Lighthouses			
	Total Marine			
J.—INDUSTRIAL	Mines			
	Manufactures			
	Total Industrial			
K.—AGRICULTURAL	Irrigation Canals			
	Tanks			
	Dykes			
	Drainage			
	Forests			
	Total Agricultural			
L.—COMMUNICATIONS	Metalled Roads			
	Unmetalled Roads			
	Bridges			
	Boat Bridges and Ferries			
	Navigable Canals			
	River Improvements			
	Accommodation for Travellers			
	Railway			
	Total Communications			
N.—ELECTRIC TELEGRAPH				
	Total Electric Telegraph			
	TOTAL PUBLIC IMPROVEMENT			
	Total Works and Repairs			
Establishment				
Reserve				
	GRAND TOTAL - - - *Rs.*			

[Pattern.]

Government of Bengal.—Public Works Budget for 186*—6*.

Part IV.—(B.) Local Abstract.

Disbursing Departments.	Military	Civil Administration.	Public Improvement.	Total.	Grand Total.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Secretariat					
Establishments - - -				00	
Chief Engineer's Office					
Establishments - - -				00	
Controller's Office					
Establishments - - -				00	
Superintending Engineer's					
Establishments - - -				00	
Civil Architect.			Total direction -		000
Original Works - - -		000		000	
Repairs - - - - -		000	000	000	000
Establishments - - -				000	
Garrison Engineer's.					
Original Works - - -	000			000	
Repairs - - - - -	000			000	000
Establishments - - -				000	
Dacca Division.					
Original Works - - -	00	00	00	000	
Repairs - - - - -	00	00	00	000	000
Establishments - - -				000	
Patna Division.					
Original Works - - -		00	000	000	000
Repairs - - - - -		00	000	000	
Establishments - - -					
2d Division G. T. Road.					
Original Works - - -	00		000	000	
Repairs - - - - -	00		000	000	000
Establishments - - -				000	
Hidgellee Division.					
Original Works - - -		00	00	000	
Repairs - - - - -		00	00	000	000
Establishments - - -				000	
CIVIL OFFICERS.					
Lower Assam.					
Original Works - - -		00		00	
Repairs - - - - -		00		00	000
Establishments - - -				000	
Total - - -					
Add Reserve - - -					0000
				GRAND TOTAL - - -	0000

[Pattern.]

Government of Bengal—Public Works Budget for 186*—6*.

Estimate of Expenditure in the Supply of Barrack Furniture.

Disbursing Departments.	Manufacture.	Repair.	Total.
Garrison Engineer - - - -			
Fort William - - - - -			
Barrackpoor Division - - - -			
Dacca Division - - - - -			
Berhampoor Division - - - -			
Dinagepoor Division - - - -			
Dinapoor Division - - - -			
2d Division G. T. Road - - -			
Etc.			
Total - - -			

[Pattern.]

Government of Bengal.—Public Works Budget for 186*-6*.

Proposed Expenditure on Account of Guaranteed Enterprise.

Nature of Outlay.	Amount.	Total.	Remarks.
Expenditure from the State's Funds.	*Rs.*	*Rs.*	
Joint Secretary and Consulting Engineer's Establishment - -			
Deputy Collector's Establishment -			*Rs.*
Purchase Money of Land - -			Including land for Calcutta City Railway. Additional ground for East India Railway at Howrah.
Total - - -			
Expenditure from Guaranteed Capital.			
East Indian Railway Main Line -			
Eastern Bengal Railway - -			
Calcutta and South Eastern Railway			The details of these Estimates have been examined by the Consulting Engineer.
Behar Irrigation Company - -			
Total - - -			

Appendix (B.)

No. 183, dated 14 January 1862.

From Lieutenant Colonel *H. Yule*, Secretary to Government of India, Public Works Department, to Officiating Inspector General of Public Works Accounts, and Member of the Civil Finance Commission.

1. Under arrangements made in this Department, with the sanction of His Excellency the Governor General in Council, you are about to proceed to visit and inspect the account offices of Nagpoor and Oudh.

2. But it appears to the Governor General in Council that your official visit should extend to the Punjab and to the North Western Provinces, and that the scope of it should go beyond that of a mere inspection of the offices of account, and should embrace the discussion with the local officers of certain subjects of moment, which have lately, as you are aware, been much before the Government of India in this Department, chiefly relating to the heavy charges for establishment in several of the provinces.

3. You were selected, as a member of the Civil Finance Commission, during the occupation of that body in the special investigation of this matter, and it is understood that the report of the commission on the subject will soon be submitted to Government. Such additional orders as may be necessary on that report will follow you; but as your journey should not be longer delayed, I am now directed by the Governor General in Council to communicate to you the following remarks and instructions, of which a copy will be sent to the various Governments concerned.

4. In Public Works Department letter to the Punjab, No. 2301 of the 29th June 1861, on the subject of the heavy establishment charges in that province, it was pointed out that it had cost nearly 5½ annas to spend a rupee during 1859-60, and that according to the estimates it would cost 4⅝ annas to spend a rupee during 1860-61.

5. This way of putting the matter was adopted as apt and impressive for the purpose, and having a great amount of general truth. But it is admitted that the question is not a simple one, and that the per-centage of our establishments to our expenditure is not by any means closely analogous, as is often assumed, to the per-centage of the cost of collecting a tax on the proceeds of the tax.

6. As long as the *executive* establishment alone is in question, it is difficult to draw a very sharp line between the man who does work and the man who supervises it. The mason and the digger there is no question about; they handle the trowel and the spade. The cost of the labour is the cost of *work*. But the man who handles the level and theodolite, who lays out a road or a bridge, and sees that its execution is accurate, comes under the head of *establishment*.

7. Again: our establishment charges embrace a good many items of expenditure which have little in common except their consisting in a monthly issue of pay. Parties employed on surveys, or the projection of works, come under the head of *establishment*, but the cost of such operations has only a very remote relation, if any, to the whole cost of work done in the province. And even where the whole duty of an establishment is not of this character, a part of its duty may be so, as almost every executive officer will, to some extent, be employed in the survey and projection of new works, and so far the apparent per-centage charge upon the *work* done will be unduly enhanced.

8. So, also, establishments maintained at ferries and boat bridges, in watching canals, locks, and embankments, and even the revenue establishments of our irrigation canals in Upper India, though the latter have been distinguished in a sub-heading, have been lumped in the budget item of *establishments*.

9. Not long since, in consequence of certain circumstances which were brought to the notice of Government by the secretary in this Department, the Government of Bengal was strongly urged to maintain a responsible and intelligent subordinate at each of the unbridged rivers on the Grand Trunk-road, to whom all travellers and carriers could look and apply as answerable for the convenient maintenance of the arrangements for crossing. The charge for these subordinates will probably swell the per-centage of establishments in Bengal. But it has no relation to the amount of money spent on works in Bengal. It is a charge debitable to the comfort of travellers and the convenience and despatch of traffic. And a proportion of the pay of the engineers over those subordinates is, doubtless, justly due to the same.

10. There is a great deficiency of data for comparison of our establishments with those of any similar body. There appear to be no English data that will have apt application, because the universal existence of contract and of professed builders and contractors affects the whole basis of comparison.

11. Further, in this country, manual labour, which makes the cost of *works*, is cheap; intelligent labour, which makes the cost of much of the establishment, is dear. This tends to heighten establishment charges.

12. These remarks are made in order that it may not be thought that the real difficulties of the subject are overlooked. The Governor General in Council is aware that a hasty judgment, disregarding facts of this kind, would not tend to promote a durable reform.

13. And in this complex state of things it is difficult to lay down a rigid standard to which the per-centage charge of establishments should be brought, though obviously the comparatively low standard at which the charge has been kept in some provinces marks a level to which the Government would aim to bring down all.

14. But to take up the matter effectively, the whole of the facts must be brought forward. This is not so at present. There is known to be in some provinces a considerable amount of establishment charged directly to the works, and which does not appear in the Departmental Budgets and Progress Reports, not being paid on separate establishment bills. Rules to remedy this were proposed some time ago in this Department, and have lately been received back from the Financial Department (whose approval was necessary) and issued. These will enable the matter to be dealt with in its real dimensions. But the first result will be to swell the magnitude of the apparent charges.

15. The natural tendency of establishments to grow beyond just bounds must be met by a minute and critical review of the details of charge in each province periodically repeated. But there are two prominent and definable causes of the heavy amount of these charges to which the Governor General in Council desires most earnestly to draw the attention of the Local Governments.

16. One is the diffused character of the expenditure.

Where a number of petty works and repairs, spread over a wide extent of country, form so considerable a part of the work of the Department, the proportionate cost of establishments must be large. In the resolution of Government in this Department on the Budgets of the current year (para. 22), it was pointed out specially for the consideration of the Local Governments whether a much larger amount of work of various kinds, not requiring engineering skill, might not, with advantage, be left in the hands of local officers. This had already been done with complete success and considerable saving in the case of the frontier posts of the Punjab. But the general suggestion has borne very little fruit, and it appears necessary to press it by personal conference, discussion of the localities where such remedies are applicable, and indication of specific tracts and places for their application.

17. But this diffusion of small jobs is not that to which the Governor General in Council more particularly alludes in the present remarks. He refers to the larger operations, the making of roads and bridges, and larger public buildings.

18. In railway making, the more rapid progress of which is frequently quoted to the disparagement of this Department, the system followed in the assignment of funds is, briefly stated, this :—that there is a certain work to be done, and that all that can be properly spent in getting it done may be spent upon it at once. There is no other limit to the money to be supplied than the limit of work that can be done in the year. The result is, of course, that there is great and palpable progress, and that it is possible to keep establishment charges at a comparatively low per-centage.

19. In the departmental assignments to the different provinces there is, on the other hand, an absolute limit to the money, and one soon reached. The whole amount for the lower provinces of Bengal to be spent on hundreds of works and innumerable repairs, is not a fourth of that to be spent during the same year on the railways in those provinces alone.

20. Still the same principle should be followed as far as possible. Fewer works should be taken up at a time, and all spent on them that can be properly spent, until they are got out of hand and added permanently to the available resources of the country. Contrary to this, it seems to the Governor General in Council that the Local Governments are too prone to assign a lakh here, and a half or a quarter lakh there, with an executive officer to each assignment. Of course, then, there is little progress and a heavy charge for establishments. In fact the establishments, to a certain extent, grow in inverse ratio to the amount of finished and available work resulting.

21. In the earlier years of the Ganges Canal, when the heavier works of that project were going on, funds were supplied much in the same way as has been stated above to be the practice with regard to railways. And the result of this concentration of expenditure was as good progress as on any railway, with establishment charges kept very low.

22. Some diffusion of work cannot be altogether avoided over so vast a country, in which so many things have to be done at the charge of the Imperial Treasury; and the temptations to the various Governments to give way to local calls are very strong, and sometimes cannot be resisted. Yet the Governor General in Council is satisfied, from all that he sees of the work of the Department, that this principle of the concentration of resources, often as it has been impressed of late years, is very far indeed from being sufficiently attended to; and he feels that he cannot enforce it too earnestly or too persistently.

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Public Works.

23. Deficient attention to this is one of the causes which leads to another mischief. The limit of the Budget assignment is often not worked up to, even by Governments which have remonstrated strongly against that limit as too narrow. This is a twofold evil. Not only is some other province, which would have gladly and beneficially availed itself of this margin of credit, deprived of this advantage, but whilst less work is done than was proposed and expected, the establishments scarcely ever fail to be maintained to the full pitch, and the per-centage of establishment charges thus swells beyond even the liberal bounds of the Budget programme. There would be much less liability to such miscalculations were the work and expenditure more concentrated.

24. The other point referred to by the Governor General in Council, as tending to maintain costly establishments, is the comparative rarity of work by contract.

The general establishment of the execution of work by contract would have advantages beyond the reduction of establishments which it should facilitate.

25. The old system of working in this Presidency had some considerable advantages to Government. An estimate was sanctioned at such and such rates. The Executive engineer carried out the work and sent in his bill for so much work done at such and such rates. If he exceeded the estimate, he had great difficulty in getting his bills passed, and in some instances the theory that he was liable for the excess was enforced in practice. Thus he was a contractor whether he would or no, and without profit. This made it a simple matter to deal with charges in general, but it was an unjust and demoralizing system.

26. Our present system of accounts is, in theory, as good as we are likely to get, and is improving in practice. But it is cumbrous, and would become unmanageably so with any *great* extension of the work of the Department beyond its present development. The more general and extensive use of contract appears to be essential to any such great extension. Contracts would also render it more easy to restrict the scope for that peculation among subordinates which is undoubtedly very prevalent.

27. A system of contract cannot be forced into existence, but something can be done towards its introduction by promoting the invitation of tenders on certain specified works of considerable extent, such as lines of road or large bridges. Undoubtedly the prices will be high, probably at first *much* higher than the work of the Department itself would cost; and this may induce reluctance in officers who take a just pride in keeping down the rates of their work from heartily promoting it. But these high prices must be encountered, if necessary, for an object so important. As contractors multiply, and competition arises, the rates will sink to a proper level.

It may also be possible, in certain localities, to obtain tenders for annual contracts for the execution of repairs of every kind. Indeed this is already done at some stations. Means should be taken to extend the practice.

28. The remarks made in the preceding paragraphs bear directly on the instructions which I am to convey to you.

In your visit to each province you will, after reporting your arrival for the information of the Lieutenant Governor or Chief Commissioner, and soliciting any special instructions that he may desire to give you, go thoroughly into the matter of establishments in conference with the Chief Engineer and the local head of the Accounts Department, classifying and analyzing the establishment lists, and the duties of each individual, with reference both to the amount of expenditure and to other pertinent circumstances. You will also discuss personally and, with reference to specific localities, how far establishments may be reduced by entrusting minor scattered works to the civil officers, or by similar remedies. You will ascertain how far, on what system, and with what success, use is made of contract at present, and consider with the Chief Engineer on what specific works of magnitude it would be most advisable to seek for tenders. And you will, with the local officers, review the expenditure in each province in relation to that principle of more concentrated effort to which the Governor General in Council attaches so much importance.

29. During all your inquiries you will act in association and conference with the local officers, and you will endeavour to make such proposals as secure their assent. But your Report to the Government of India will be your own and not a joint report. The Governor General in Council is aware that the attention of several of the Local Governments has been directed to the object of this inquiry; he believes that your visit, with these instructions from the Government of India, will strengthen their hands in carrying them out; and he knows that, after this distinct expression of the views and objects of the Governor General in Council, you will find hearty co-operation from the officers of every Local Government.

30. You will draw up, and submit, your Report in regard to each province as soon as possible after your visit to it is completed.

APPENDIX (C.)

INDIAN RAILWAYS.

Name and general Description of Railway.	Length sanctioned; and Names of present Termini.	Length open for Traffic, and Names of Termini.	Length in Progress, with Names of Termini.	Length not Commenced.	Estimated Cost per Mile.	Highest Rate of Passenger Fare per Mile.	Lowest Rate of Passenger Fare per Mile.	Highest Rate of Goods per Ton.	Lowest Rate of Goods per Ton.	Gross Traffic Receipts per Mensem per Mile of Railway open for Traffic.
MADRAS PRESIDENCY:					Rs.					£. s. d.
North West Line - - -	327 Miles. Arconum to Moodgul - -	26½ Miles. Arconum to Pootoor - -	233½ Miles. Pootoor to Bellary - -	67 Miles. Bellary to Moodgul.	(A) 1,20,795	One anna or 1½ d.	Two pie or ¼ d.	Three annas or 4½ d.	Two annas or 3 d.	(a) 11 12 –
South West - - - -	405 Miles. Madras to Beypoor - - -	259 Miles. Madras to Senkerrydroog - - 231 Miles. Beypoor to Cootipooram - - 28 „ 259 Miles.	146 Miles. Senkerrydroog to Cootipooram.	- none - -	(A) 1,20,493	- ditto -	- ditto -	- ditto -	- ditto -	(a) 40 – –
Branch of the South West Line.	84 Miles. Jalarapett Junction to Bangalore	- - none - -	84 Miles. Jalarapett Junction to Bangalore.	- none - -	(A) 1,20,000	- Line not yet opened for Traffic.				
Great Southern of India -	78½ Miles. Negapatam to Trichinopoly -	48 Miles. Negapatam to Tanjore -	30½ Miles. Tanjore to Trichinopoly -	- none - -	(A) 90,446	One anna and six pie or 2¼ d.	Three pie or ⅜ d.	One anna & nine pie or 2⅝ d.	Ten pie or 1¼ d.	(b)
BOMBAY PRESIDENCY:										
Great Indian Peninsula. North East Extension	610¾ Miles. Bombay to Jubbulpoor 601½ Miles. Thull Ghat Incline - 9¼ „ 610¾ Miles.	195 Miles. Bombay to Kussara & Mahim Branch 76½ Miles. Egutpoora to Chaleesgaum - 118½ „ 195 Miles.	415¾ Miles. Chaleesgaum to Jubbulpoor - 406½ Miles. Thull Ghat Incline 9¼ „ 415¾ Miles.	- none - -	(c) 97,304	One anna or 1½ d.	Two pie or ¼ d.	Three annas or 4½ d.	Eight pie or 1 d.	(c) 62 14 –
Great Indian Peninsula. North East Nagpoor Branch.	243¼ Miles. Bhosawul to Nagpoor - -	- - none - -	243¼ Miles. Bhosawul to Nagpoor - -	- - none - -		- ditto -	- ditto -	- ditto -	- ditto -	
Great Indian Peninsula. South East Extension.	379¼ Miles. Cullian to Moodgul - 366 Miles. Bhore Ghat Incline - 13¼ „ 379¼ Miles.	243 Miles. Cullian to Campoolia 38 Miles. Khandalla to Sholapoor - - 205 „ 243 Miles	13¼ Miles. Bhore Ghat Incline - -	123 Miles. - Sholapoor to Moodgul -		- ditto -	- ditto -	- ditto -	- ditto -	
Bombay, Baroda, and Central India - - - - -	310 Miles. Bombay to Ahmedabad - -	132¼ Miles. Bulsar to Dhoolia - -	177¾ Miles. Bombay to Bulsar 124¾ Miles. Dhoolia to Ahmedabad - - 53 „ 177¾ Miles.	- none - -	(B) 1,22,784	One anna and six pie or 2¼ d.	Two pie or ¼ d.	Two annas & six pie or 3¾ d.	- ditto -	(d) 32 10 –
Sindh Railway - - -	114 Miles. Kurrachee to Kotree, and Branch to Ghizree.	105 Miles. Kurrachee to Kotree - -	9 Miles. Branch to Ghizree - -	- none - -	(B) 1,40,000	- ditto -	Three pie or ⅜ d.	- ditto -	Seven pie or ⅞ d.	(d) 31 10 –
Indus Flotilla.—The total expenditure on the Indus Flotilla on Capital Account, as far as is known in Calcutta on this date, is likely to be from first to last about 335,000 l.										

(continued)

Appendix (C.)—INDIAN RAILWAYS—*continued.*

Name and general Description of Railway.	Length sanctioned; and Names of present Termini.	Length open for Traffic, and Names of Termini.	Length in Progress, with Names of Termini.	Length not Commenced.	Estimated Cost per Mile.	Highest Rate of Passenger Fare per Mile.	Lowest Rate of Passenger Fare per Mile.	Highest Rate of Goods per Ton.	Lowest Rate of Goods per Ton.	Gross Traffic Receipts per Mensem per Mile of Railway open for Traffic.
BENGAL PRESIDENCY:										
EAST INDIAN. Main Line - *Bengal Section.* Calcutta to Kurrumnassa, 486 Miles. *N. W. P. Section.* Kurrumnassa to Delhi, 534½ Miles.	1,020½ Miles. Calcutta to Delhi - - -	537 Miles. Calcutta to Jamalpoor - - 297 Miles. Allahabad to Shekoabad - - 240 „ 537 Miles.	483½ Miles. Jamalpoor to Kurrumnassa - 189 Miles. Kurrumnassa to Allahabad - - 148 „ Shekoabad to Delhi 146½ „ 483½ Miles.	- none - -	(B) 1,93,875	One anna and six pie or 2¼ *d.*	Three pie or ⅜ *d.*	Five annas or 7½*d.*	Ten pie or 1¼ *d.*	(*d*) 116 14 – (*d*) 75 – –
Branch Lines - Bengal Section	89 Miles. Raneegunge Branch from Khanoo - 46 Miles. Burrakur Extension from Raneegunge - 22 „ Singarun Branch from ditto - - 7¼ „ Rajmahal Branch from Teen Pahar - 7¼ „ Monghyr Branch from Jamalpoor - 5 „ Patna - - - 1½ „ 89 Miles.	56½ Miles. Raneegunge Branch - - 46 Miles. Singarun - - 3¼ „ Rajmahal - - 7¼ „ 56½ Miles.	32½ Miles. Singurun Branch - 4 Miles. Burrakur Extension 22 „ Monghyr Branch - 5 „ Patna - - - 1½ „ 32½ Miles.	- none - -		- ditto -	- ditto -	- ditto -	- ditto.	
Branch Lines - N. W. P. Section -	25¼ Miles. Benares Branch - 6¼ Miles. Allahabad Fort Branch 2¾ „ Cawnpoor River ditto 3 „ Agra ditto - - 13¼ „ 25¼ Miles.	2¾ Miles. Allahabad Fort Branch -	22½ Miles. Benares Branch - 6¼ Miles. Cawnpoor ditto - 3 „ Agra ditto - - 13¼ „ 22½ Miles.	- none - -		- ditto -	- ditto -	- ditto -	- ditto.	
Jubbulpoor Extension - - (Line only just commenced.)	225 Miles. Allahabad to Jubbulpoor - -	- none - - - -	26 Miles. Allahabad towards Jubbulpoor.	199 Miles. Jubbulpoor towards Allahabad.	(D) 88,889					
Eastern Bengal - - - (Line not yet opened for traffic.)	109 Miles. Calcutta to Kooshtee - -	- none - - - -	109 Miles. Calcutta to Kooshtee - -	- none - -	(B) 1,21,888					
Calcutta and South Eastern -	29 Miles. Calcutta to Mutlah - - -	15 Miles. Calcutta to Chappahatty -	14 Miles. Chappahatty to Mutlah -	- none - -	(B) 1,35,910	One anna or 1½ *d.*	- ditto -	- ditto -	- ditto -	(*d*) 16 12 –
Punjab - - - - - (Line from Lahore to Umritsur, about 36 miles, officially opened on 1st March 1862; but not yet opened for traffic.)	250 Miles. Umritsur *viâ* Lahore to Mooltan	- none - - - -	250 Miles. Umritsur to Mooltan - -	- none - -	(D) 87,186					

(A) Calculated on the latest Madras Estimates.
(B) Calculated on the estimated amount entered in Mr. Juland Danvers's latest Railway Report, supplemented by consideration of demands for money for 1862–63.
(C) Calculated on amount entered on Mr. Juland Danvers's latest Railway Report.
(D) Calculated on revised Estimate of the Railway Company.

(*a*) Calculated on the Receipts for November 1861.
(*b*) No Traffic Return received since the line was opened on 2d December 1861.
(*c*) Calculated on the Receipts for December 1861.
(*d*) Calculated on the Receipts for January 1862.

15 March 1862.

H. Yule, Lieut. Col.,
Secretary to the Government of India, P. W. D.

Appendix (D.)

ACCIDENTS ON RAILWAYS IN INDIA DURING THE YEAR 1861.

ACCIDENTS ATTENDED WITH INJURY TOLIFE OR LIMB.

I.—Accidents to Passengers.

East Indian Railway, Bengal Division.

Fatal	nil	1.
Injury	1	

No. 1. *Injury.*—On the 6th June, a third-class passenger fell out of a down train from Rajmahal on the line near Bhediah. He had been standing against the door of the carriage, which opened and he fell out; the train being in motion at the time, the man received severe injuries from the accident.

It has been suggested to the railway authorities to adopt some precautionary arrangement for the future to provide against the chances of the doors of carriages being left open, or being too easily opened.

East Indian Railway, N. W. Provinces.

Fatal	2	2.
Injury	nil	

On the 19th November, at Allahabad, a Native woman was found dead in a third-class carriage in one of the down trains. The body was removed by the police.

On the 24th December, a similar case occurred at Etawah. A Native was found dead in a third-class carriage. There were three other passengers in the carriage. The circumstance was reported to the Local Magistrate.

Madras Railway.

There were no accidents to passengers on this railway during the year 1861.

Great Southern of India Railway.

There were no accidents to passengers on this railway during the year 1861.

Great Indian Peninsula Railway.

Fatal	nil	6.
Injury	6	

No. 1. *Injury.*—On the 1st January, at the Campoolee Station, two horse-keepers were severely injured by a train getting off the line, owing to defective points. One had his ribs broken, and the other dislocated his wrist.

No. 2. *Injury.*—July 20th. Two passengers were injured at the Khandulla Station by a collision between an engine and some vehicles. The accident was owing to the negligence of the driver.

No. 3. *Injury.*—September 8th. A first-class passenger was hurt near Narel by a stone being thrown into the carriage.

No. 4. *Injury.*—September 19th. At the Callian Station a female dislocated her wrist in alighting from a third-class carriage.

Bombay, Baroda, and Central India Railway.

Fatal	2	3.
Injury	1	

No. 1. *Fatal.*—April 17th. A female Parsee fell off a bridge at the Delhi Gate Station, Surat, while walking between the train and the bridge, on her leaving the train, and thereby met with her death.

No. 2. *Injury.*—July 5th. At the Baroda Station a man was cut in the eye in a collision between two trains, caused by the carelessness of the driver.

No. 3. *Fatal.*—December 4th. A man was killed between Meagan and Itola in alighting from the train when it was in motion.

Sindh Railway.

There were no accidents to passengers on this line during 1861.

II.—Accidents to Servants of the Railway Company, or Persons Employed on Railways.

East Indian Railway, Bengal Division.

Fatal	25	79.
Injury	54	

No. 1. *Injury.*—On the 10th January, a Native porter in the Howrah Yard was crushed between two waggons at a turn-table.

No. 2. *Fatal.*—On the 12th January, a coolie was killed by a ballast train running over him at the Chandmarree Gate, Howrah Yard, owing to the carelessness of the pointsman. Instructions have been given for the better management of points for the future.

No. 3. *Injury.*—On the same day a coolie was severely hurt at Chandmarree by jumping off one of the trucks of a ballast train.

No. 4. *Fatal.*—On the 21st January, at the Hooghly Station, a Native porter was killed by jumping into a coal waggon before the train to which he belonged had stopped.

No. 5. *Fatal.*—On the 2d February, a gatekeeper was killed on trying to run across the line near Raneegunge.

No. 6. *Injury.*—On the 1st March, near Rajmahal, a guard whilst on duty fractured his leg by coming in contact with a gatepost placed improperly near the line.

No. 7. *Fatal.*—On the 5th March, a Native woman employed on work under the Bally Bridge was killed by a fall from the rails. She was sitting on a piece of wood near the rails. The passing of a ballast train shook the log, and the woman lost her balance and fell. Her head came in contact with one of the trucks, and she died on the spot.

No. 8. *Injury.*—On the 13th March, a coolie injured his leg in crossing the line in front of a running engine at Chandmarree.

No. 9. *Fatal.*—On the 14th March, an engine driver, whilst shunting his train at Putterghattee ballast siding, missed his footing, and received a frightful injury to his foot, from the effects of which he died.

No. 10. *Fatal.*—On the 15th March, some trucks of a ballast train became uncoupled at the same place, and a Native coolie in getting down fell between two waggons. Both his legs were broken, and he died the next day. To prevent similar accidents for the future, a break van has been ordered for the ballast train.

No. 11. *Fatal—Injury.*—On the 27th March, a truck attached to a ballast train conveying straw for workmen's huts caught fire near Paneeghur Station. The coolies in the truck jumped out and were run over. Three were killed on the spot, and seven more or less injured. The cause of the fire is attributed to the carelessness of the coolies themselves, in smoking on the very truck which carried the straw, in disobedience to instructions given them.

No. 12. *Injury.*—On the 14th April, a Khalassee was knocked down by an engine in the course of backing to be attached to a stores train at Burdwan. The man suffered severe injuries, his right leg and right arm being afterwards amputated.

No. 13. *Injury.*—On the 26th April, a policeman in trying to close the door of a carriage, which he had observed open before the train had stopped, missed his footing and fell between the platform wall and carriage. He was slightly injured.

No. 14. *Fatal.*—On the 8th May, a Native engaged in work in a coal shed at Rajmahal had erected outside of it a scaffolding which projected over the line. A train passing by struck against the scaffolding, precipitating the man who was standing on it. He was run over and severely injured, from the effects of which he died. There was no one but himself to blame, as he had received instructions not to put the scaffolding outside.

No. 15. *Injury.*—On the same day a fireman was severely injured by a collision between two trains at Chandernagore.

No. 16. *Fatal.*—On the 20th June, a native woman fell off a ballast train on the Raneegunge tramp, and was killed by the wheels of a waggon passing over her.

No. 17. *Injury.*—On the 28th June, at the Rampoorhaut Station, a ballast engine, with waggons attached, was thrown off the main line. About 36 coolies were more or less injured. The accident was attributed to the neglect of the pointsman.

No. 18. *Injury.*—On the 13th September, a coolie had one of his feet severely crushed and partly cut off by a ballast train. There was no European with the train, and the precise cause of the accident is unknown.

No. 19. *Fatal.*—On the 12th October, a Native woman was jerked off a ballast train on to the line at Bhaugulpoor, and crushed to death.

No. 20. *Fatal.*—On the 26th October, a coolie engaged in works at the Khanoo Junction, who was both deaf and dumb, not hearing the approach of a train behind him, was run over and killed by it.

No. 21. *Fatal.*—On the 13th November, a Native porter was run over and killed by a loaded waggon near the Chandernagore-gate.

No. 22. *Fatal.*—On the 16th November, a coolie boy fell out of a ballast train near Farka, in the Bhaugulpoor Division, and was run over and killed.

No. 23. *Fatal—Injury.*—On the 22d November, as a ballast train was passing through certain points in the Rajmahal Division, the pointsman put a portion of the train on one line, and then shifted the points and put the remaining portion on another, in consequence of which one Native woman was killed and two others severely injured.

No. 24. *Fatal.*—On the 25th November, a Native woman, in attempting to recover a spade which she had left on the line at the Mullarpoor Station, was run over by a passenger train and killed.

No. 25. *Fatal.*—On the 26th December, a Native porter was run over and killed by a special train near Hooghly station. The accident was owing to his own carelessness.

No. 26. *Fatal.*—On the 28th December, a Native policeman was run over and killed by a pilot engine. The accident is attributed to the man's own negligence.

The following accidents occurred in connection with construction:—

No. 27. *Fatal.*—On the 17th January, a coolie fell down a shaft and was killed.

No. 28. *Fatal.*—On the 24th January, a coolie engaged in the carriage detail store department at Howrah received injuries from which he died.

No. 29. *Fatal.*—On the 22d March, a Native miner was killed by an explosion at the Monghyr tunnel. The fuze had hung fire.

No. 30. *Fatal.*—On the 6th September, an inspector was run over and killed by a trolly laden with chairs which he was taking to Bally. One of the chairs fell down, and the trolly ran over it. The poor man in trying to jump off was jerked and thrown on to the rails, the trolly passing over his chest.

No. 31. *Fatal—Injury.*—On the 18th October, a coolie was killed and another severely injured by a rail falling upon them.

No. 32. *Fatal.*—On the 7th December, a coolie employed in the steam-boat department at Howrah was killed by a log of timber falling upon him.

East Indian Railway, N.W. Provinces.

Fatal - - - - - - - - -	4	8
Injury - - - - - - - - -	4	

No. 1. *Injury.*—On the 7th February, a railway khalassie attempting to couple the guard's van to the waggons while the train was in motion, lost his footing and fell with his left arm across the rail.

No. 2. *Injury.*—On the 27th April, a greaser, whilst standing on the steps of the break van of the train to which he belonged, came in collision with one of the vehicles of a special fire-wood train which was standing on the siding at Berhampore, and was severely injured. The accident was reported to the magistrate at Futtehpoor, where the man was conveyed for medical treatment.

No. 3. *Injury.*—On the 20th May, a guard cut his head severely by losing his footing from the foot-board of the break van.

No. 4. *Fatal.*—On the 8th June, a coolie got his foot crushed under one of the wheels of a break van while taking the latter out from the waggon shed. He was immediately removed to the hospital, but died on the 21st instant.

No. 5. *Fatal.*—On the 7th July, a coolie woman in attempting to remove some kunker which happened to be on the rails, was run over by a down goods train, and immediately killed.

No. 6. *Fatal.*—On the 7th August, a similar accident occurred in Bhowpoor.

No. 7. *Fatal.*—On the 1st September, a boy concealed himself in a truck loaded with sleepers, and when the train approached Etawah he stood up in the truck, and, losing his balance, fell between the wheels and the chains. He was run over and killed.

No. 8. *Injury.*—On the 9th November, at Roora station, a Native greaser, through his own carelessness, got his foot run over and injured.

Madras Railway.

Fatal	5	6
Injury	1	

No. 1. *Fatal.*—On the 23d January, a woman working at Perambore for the ballast contractor, was standing with an infant near the ballast train then in motion. She was warned of her danger; but, in turning away, she slipped and fell across the rails. One waggon passed over her, taking off both her legs and arms, and also the child's arm. The woman was killed instantly, and the child shortly after expired.

No. 2. *Fatal.*—On the 16th April, a pointsman at the Vellore station, in attempting to mount the engine while being brought out of the shed, slipped off the steps, and had his foot crushed under the wheel. The injuries he received resulted in death,

No. 3. *Fatal.*—On the 27th July, a coolie accidentally falling on the rail while leading a loaded ballast train, got his left foot severely injured, from the effects of which he died a few days afterwards.

No. 4. *Injury.*—On the 11th November, a line watchman had his leg broken by a truck passing over it. It appears he was running towards the truck, and, when close to it, his leg slipped, and falling across the rails he got severely injured.

No. 5. *Fatal.*—On the 12th November, another watchman was run over by a goods train. He was stunned after the engine had passed him, which caused him to stagger and fall towards the train. He was apparently struck when falling by one of the waggons, and thereby injured in several places. He died two hours after the accident.

Great Southern of India Railway.

Fatal	1	1
Injury	nil	

No. 1. *Fatal.*—On the 4th December, near Negapatam, a coolie in attempting to cross the lines in front of an approaching engine, was knocked down and severely injured in his right foot and body, from the effects of which he died.

Great Indian Peninsular Railway.

Fatal	12	36
Injury	24	

No. 1. *Injury.*—On the 1st January, at the Campoolee Station, a guard injured his leg by jumping from the van, on the train getting off the line, owing to defective points.

No. 2. *Injury.*—On the 5th January a pointsman's leg was broken at the Sholapoor Station by a hook of the tail rope, which he attempted to lift while one end was attached a moving engine.

No. 3. *Injury.*—On the 9th January, at the Callian Station, a guard in attempting to uncouple a train in motion was caught by the buffers and slightly injured.

No. 4. *Injury.*—On the 3d February, a fireman in alighting from an engine at the Ooroolee Station, fell over the parapet of a bridge.

No. 5. *Injury.*—On the 9th February, at the Campoolee Station, a pointsman in attempting to pass between buffers of waggons in shunting, was crushed, and severely injured.

No. 6. *Injury.*—On the 12th February, at the Poona Station, a porter was crushed between the buffers of waggons while shunting.

No. 7. *Injury.*—On the 16th February, a driver was scalded in attempting to screw a plug up in the smoke box.

No. 8. *Fatal.*—On the 23d February, a coolie was knocked down at the Lanowlie Station, by a collision (caused by carelessness of driver) whilst cleaning the tubes of an engine.

No. 9. *Injury.*—On the 26th February, at the Budlapoor Station, a fireman fell from an engine whilst oiling the same, and was injured.

No. 10. *Injury.*—On the 2d March, another fireman was slightly injured at the Tanna Station, by jumping off an engine in motion.

No. 11. *Injury.*—On the 11th March, a pointsman at Carnoe Bunder, in attempting to jump on a waggon, fell and got four of his toes cut off.

No. 12. *Fatal.*—On the 20th March at the Mazagon Bridge, a fireman, whilst sitting upon the coals piled on the tender, came in contact with an arched bridge. His head was severely injured, from the effects of which he died.

No. 13. *Fatal.*—On the 22d March, a signalman having fallen asleep on the rails, near Nassick, was run over and killed.

No. 14. *Fatal.*—On the 28th March, a pointsman, while running along the line at the Budlapoor Station, was knocked down by an engine and killed.

No. 15. *Injury.*—On the 9th May, a loader in placing his hand on the rail on the Barsee road while shunting, got two of his fingers crushed.

No. 16. *Injury.*—On the 21st May, a contractor's labourer was injured from being struck by a waggon on the Sholapoor Line while shunting.

No. 17. *Injury.*—On the 2d June a guard was upset in the break-van and slightly injured, caused by the violent shunting of the train.

No. 18. *Injury.*—On the 7th June, a pumpman got his foot crushed at the Sulligaum Station in attempting to mount an engine.

No. 19. *Fatal.*—On the 25th June, a gateman in attempting to cross the line at the Coorla Station, was run over and killed.

No. 20. *Fatal.*—On the 4th July, a signalman while sleeping across the rail, about four miles from Pooree, was run over and killed.

No. 21. *Injury.*—On the 6th July, a muccadeen was caught between buffers of waggons in shunting near Wassind, and was slightly injured.

No. 22. *Injury.*—On the 20th July a driver, a fireman, and three other servants of the Company were injured by a collision between the engine and some vehicles containing passengers at the Khandalla Station. The accident is attributed to the negligence of the driver.

No. 23. *Fatal.*—On the 11th August, at the same station, a fireman while oiling an engine, fell from the same and was killed.

No. 24. *Injury.*—On the 4th September, at the Bombay Station, a carriage cleaner, in attempting to stop a waggon which was passing into the goods warehouse, was crushed and injured.

No. 25. *Injury.*—On the 14th October, a porter was struck by the door of a waggon while it was being placed on a turn-table.

No. 26. *Fatal.*—On the 1st November, a muccadeen, who was placed to show a caution signal between Tanna and Callian, was run over by a train and killed.

No. 27. *Injury.*—On the 16th November, at the Bycalla Station, a porter injured his foot, owing to his own negligence while shunting a waggon.

No. 28. *Fatal.*—On the 18th November, near the same station, a foreman of loaders was run over by an engine and killed, while walking on the line.

No. 29. *Fatal.*—On the 19th November, a contractor's coolie got crushed at the Coorla Station between two waggons which were being shunted by the contractor's people.

No. 30. *Injury.*—On the 29th November, a porter having fallen asleep on the rail at the Ooroolee Station, got his hand crushed by an engine running over it.

No. 31. *Fatal.*—On the 16th December, at the Khurdee Station, a Parsee lad, the contractor's servant, in jumping off a break van in motion, missed the platform and was run over. He died from the injuries he received.

No. 32. *Fatal.*—On the 26th December, a policeman, through his own neglect in not standing out of the way on the approach of an engine between Bombay and Byculla, was run over by the engine and killed.

Bombay, Baroda, and Central India Railway.

Fatal - - - - - - - - - -	5	7
Injury - - - - - - - - - -	2	

No. 1. *Injury.*—On the 27th January, two firemen were slightly injured by the train being thrown off the rail by an obstruction maliciously placed.

No. 2. *Fatal.*—On the 4th May, near Baroach, three porters were killed by a collision between a luggage van and a ballast waggon. Fault of contractor's people.

No. 3. *Fatal.*—On the 12th May, a labourer of the Company was killed at the Chumargam Station by falling under a waggon of a train in motion.

No. 4. *Fatal.*—On the 2d September, another labourer was killed in a similar manner at the Meagan Station.

Sindh Railway.

Fatal - - - - - - - - -	2	3
Injury - - - - - - - - -	1	

No. 1. *Fatal.*—On the 8th August, a coolie was killed at Kotree by a collision between a shunting engine and another standing under the shed.

No. 2. *Fatal.*—On the 12th September, another coolie of the Company was killed at the Pipree Station by a truck being thrown off the rail.

No. 3. *Injury.*—On the 11th September, at the Kotree Station, a coolie was injured by falling between two waggons while shunting.

III.—Accidents to Persons neither Passengers nor Servants of the Railway Companies.

East Indian Railway, Bengal Division.

Fatal - - - - - - - - -	3	5
Injury - - - - - - - - -	2	

No. 1. *Fatal.*—May 1st. A native woman was found dead on the line between Mugra and Pandooah. She was trespassing on the line, and had probably been run over by a train on the preceding night.

No. 2. *Fatal.*—May 18th. An old woman not hearing the approach of a train, was run over near Betawa, and thrown over a bridge. She died from the injuries she received.

No. 3. *Injury.*—August 3d. At Salendra a man was very severely injured by a train running over him. He was trespassing on the line with the intent to commit suicide when he met with the accident. His left arm was severed from his shoulders.

No. 4. *Injury.*—August 18th. A native woman trespassing on the line between Nadal and Paneeghur was run over by a passenger train, but fortunately escaped without any serious injuries. Instructions were issued that in all similar cases the trespassers should be prosecuted by the Railway Company.

No. 5. *Fatal.*—September 24th. A native woman was found dead on the line between Pulsa and Pakowr. She had probably been run over whilst trespassing there on the preceding night.

East Indian Railway, N. W. Provinces.

Fatal - - - - - - - - -	2	2
Injury - - - - - - - - -	nil	

No. 1. *Fatal.*—January 9th. A native woman was run over and killed by an empty engine goods train. She is supposed to have thrown herself on the rail. The case was reported to the joint magistrate for investigation.

No. 2. *Fatal.*—14th October. A Native was run over by a down special goods train near the second crossing beyond Roora. He was killed on the spot.

Madras Railway.

Fatal - - - - - - - - -	1	2
Injury - - - - - - - - -	1	

No. 1. *Injury.*—On the 19th March a Moplah boy was run over by a train. From his own account it appears that he was asleep across the rails till the train was close upon

him, when he raised his head and right hand. The wheels passed over his fingers, and the fire-box struck his head. The four fingers of the right hand were cut off, and the scalp laid open.

No. 2. *Fatal.*—On the 2d of June a man was run over and killed by a passenger train. It appears from the report of the traffic manager that he was run over while lying upon the line. His skull was laid open and his right hand cut off.

Great Southern of India Railway.

Nil.

Great Indian Peninsula Railway.

Fatal	12	16
Injury	4	

No. 1. *Fatal.*—On the 12th January, a Native was killed between Byculla and Dadur; he was knocked down by a train while trespassing on the line.

No. 2. *Injury.*—On the 29th January, a similar accident, attended with slight bruises, occurred to a labourer near the village of Davee.

No. 3. *Fatal—Injury.*—On the 7th February, three persons were killed and one was injured, from waggons being thrown off the line at a level-crossing among a crowd of bystanders awaiting the opening of crossing-gates.

No. 4. *Fatal.*—On the 6th March, a Native woman was found dead near Byculla; she is supposed to have been run over by a train while trespassing on the line.

No. 5. *Fatal.*—On the 1st April, a Native trespasser, who had fallen asleep across the rails at the Callian Station, was run over and killed.

No. 6. *Fatal.*—On the 2d April, near Sana Bridge, a Native was run over and killed while trespassing on the line.

No. 7. *Fatal.*—On the 9th April, a watchman of the Vehar Waterworks was run over and killed while trespassing on the line. The accident occurred eight miles from Bombay.

No. 8. *Fatal.*—On the 21st April, a Native trespasser, in attempting to cross while waggons were being shunted, was run over and killed. The accident occurred at the Decksal Station.

No. 9. *Fatal.*—On the 1st June, at the Elphinstone Bunder, a Native trespasser was run over and killed.

No. 10. *Fatal.*—On the 23d June, a woman was run over and killed whilst trespasssing near Sholapoor.

No. 11. *Injury.*—On the 19th September, a labourer trespassing on the line near Byculla was struck by an engine in shunting, and slightly injured.

No. 12. *Injury.*—On the 19th October, another labourer, while trespassing, was struck in a similar manner between Bombay and Byculla.

No. 13. *Fatal.*—On the 31st October, a Native trespasser was run over and killed between Barsee and Macheb; he is supposed to have laid himself on the rail with a suicidal intent.

Bombay, Baroda, and Central India Railway.

Fatal	2	2
Injury	Nil	

No. 1. *Fatal.*—On the 15th August, near Itola, an old woman, in attempting to cross the rails in front of an engine, was run over and killed.

No. 2. *Fatal.*—On the 17th December, a similar accident occurred to a Native trespasser between Baroda and Chamargaum.

Sindh Railway.

Fatal	1	1
Injury	Nil	

No. 1. *Fatal.*—Only one accident occurred, resulting in the death of a Native trespasser, on 8th September. It was attributed to his own imprudence in attempting to cross the line in front of an engine.

IV.—Miscellaneous Accidents, and Accidents from Collisions, or Engines or Carriages leaving the Rails.

East Indian Railway, Bengal Division.

There were 14 accidents, three of which, resulting in the deaths of three and injuries to 44 men, have also been noticed in the previous classes.

February 19th.—A goods train got off the line near Hooghly Station, and ran down the bank, damaging trucks and tearing up permanent way. There was no damage, however, to either life or limb. The cause of the accident was not clearly ascertained.

March 2d.—A collision took place between two goods trains at Pundooah, through defective working of the signals. The accident was attended with no personal injuries.

March 2d.—A passenger train got off the line at Hooghly, through the negligence of the pointsman. There was no harm done beyond delaying the train.

March 8th.—The baggage of Her Majesty's 75th Regiment, coming by special train from Raneegunge, was destroyed by fire at Undal Station.

March 27th.—There was a serious accident by fire near Paneeghur. Some straw carried in a ballast train caught fire. The coolies who were at the time on the truck containing the straw jumped out; three were killed on the spot, and seven severely injured.

May 8th.—A goods train ran into a night-mail train at Chandernagore, owing to the defective working of signals. The fireman of the mail train was seriously injured.

June 6th.—The up-mail train, while entering the facing points at Khanoo Junction, was thrown off the line by the carelessness of the pointsman.

About the same time and place, the down-mail train, going on the loop-line in order to avoid the obstruction caused by the overturned mail train, was likewise thrown off the line by a trolly left there. The railway servants were to blame in neglecting to keep the loop-line clear before permitting the down mail train to enter it. The accident resulted in considerable damage to property.

June 13th.—A locomotive engine, being driven at too great a speed, ran into some ballast waggons which were being loaded at the time. Some of the latter were rendered perfectly useless by the accident.

June 28th.—A ballast engine, with waggons attached, owing to the carelessness of the pointsman, was thrown off the main line at Rampoorhat Station. About 36 coolies were more or less injured, though none mortally.

June 30th.—At Connagore Station a mail train ran into a goods train, doing considerable damage to rolling-stock, though none to life or limb. The accident is attributed to the carelessness of the guard of the goods train.

August 6th.—A mail train was thrown off the line at Khanoo Junction, in consequence of the pointsman's negligence.

August 7th.—A goods train, while passing through facing-points at the same junction, was thrown off the line through the misconduct of the pointsman.

August 16th.—A passenger and a goods train were thrown off the line at the points leading to the coke-shed in the Howrah Yard. This accident was also occasioned by the carelessness of the pointsman.

East Indian Railway, North Western Provinces.

There were eight accidents :—

January 4th.—Some piece-goods were destroyed by fire in a down goods train between Khaga and Allahabad, owing to the neglect of travelling without tarpauling. The station-master at Khaga and the guard of the train, being both in fault, were punished by suspension.

June 13th.—An attempt was made to throw a down passenger train off the line near Sarawa, by placing two pieces of wood (a "lever" and a "straight-edge") across the rails. Both the implements were broken. The case was reported to the Magistrate of Allahabad, and the Chief Engineer issued orders to the district engineers on the open line to have all the plate-laying tools secured after the day's work.

July 5th.—Two waggons of a goods train ran off the line at the Allahabad Station Yard, owing to the pilot engine having been improperly taken into a siding when there was no man in charge of the points.

July 7th.—Another waggon was thrown off the line in the same yard. The pointsman who was in fault was immediately put under arrest.

August 14th.—At Cawnpoor some goods were burnt by spontaneous combustion in a bale of blankets confined in a covered goods waggon.

October 14th.—An up passenger train ran off the line at the Cawnpoor Station Yard, through the carelessness of the pointsman in turning the engine to the wrong road. The accident was attended with considerable damage to the property of the Company.

November 1st.—There was a collision on the Furruckabad Road to Etawah, between a down goods train and a trolly, owing to the latter being out without a signal.

December 21st.—A large quantity of sugar and a number of empty bags were destroyed by fire between Cawnpoor and Bhowpoor. The accident was caused by a spark from the engine, in consequence of the wire-gauze of the chimney being out of order.

It appears that a wrong description of wire-gauze was sent up from Calcutta for the repairs of chimneys. Inquiry has been made to ascertain how the mistake originated, and whether a supply of the right kind has since been received, or when expected to arrive.

Madras Railway.

There were four accidents—

One from a waggon going off the line, two from fire, and one from a chair being placed on the rails by some mischievous person.

The first happened on the 3rd January, at the Cuddumbatoor Station. The road-waggon and break-van attached next to the engine of a goods train came in contact with an empty waggon standing on the "through siding," whereby the latter was thrown off the line, and the break-van and road-waggon were slightly damaged. The station-master and his staff were considered to blame in the matter, and were fined each one month's pay.

The second accident was from fire. Four waggons of a goods train from Salem were burnt on the 19th February. The origin of the fire was not ascertained.

The third accident, also from fire, happened on the 23d February, when the temporary goods shed at the Amboor Station was burnt to the ground. The station-master considered that the fire was caused by a spark from the engine of a passing train.

The fourth accident occurred at the 110th mile from Madras, on the 20th February. The train ran over a chair placed on the rail by some mischievous individual. The shock that the engine sustained by the accident almost disabled it.

Great Southern of India Railway.

Nil.

Great Indian Peninsula Railway.

One hundred and forty-eight accidents in all were reported, of which five have been already noticed, having caused the death of five men and injuries to 11. They were as follows:—

42 Cases of engines and waggons getting off the rails through carelessness of drivers and pointsmen, or defects in rails or crossing-points, &c.

28 Cases of collision, of which 10 arose from engines and waggons running into lorries.

1 Case of collision with works adjacent to line.

19 Cases of waggons catching fire.

34 Cases of cattle being killed by trains on the line, of which 19 were accompanied by injury to rolling-stock.

11 Cases of gates being run through.

11 Cases miscellaneous.

2 Cases of malicious attempts to throw trains off the line.

Bombay, Baroda, and Central India Railway.

There were seven accidents reported, three of which, having been attended with injury to life or limb, have already been noticed:—

3 by collision, causing death to three porters, and injury to one passenger.

2 by fire, attributed to sparks from the engine.

1 by obstruction maliciously placed on the line, causing injuries to two firemen.

1 resulting in delay to traffic by ballast being washed away by rain.

Chap. VIII.
Public Works.

Sindh Railway.

Fourteen accidents reported, of which two, being fatal to servants of the Company, have already been noticed:—

- 4 Cases of cattle being killed by trains on the line.
- 3 Cases of collision, one of which was fatal to a coolie.
- 3 Cases of waggons being thrown off the line; one through misconduct of the pointsman, the others from stones falling on the line, resulting in one case in the death of a coolie.
- 1 Case of a gate being run through.
- 1 Case of an engine being damaged by striking against a stone on the line.
- 2 Cases of fire by sparks from the engine.

Three statements are attached; one showing all accidents attended with injury to life or limb, giving the number of persons killed or injured from all causes; the second showing the nature of all accidents, and the third showing the comparative number of passengers killed or injured with reference to the numbers carried.

RETURN No. 1.

NUMBER of Persons Killed and Injured from all Causes on *Indian* Railways during 1861.

	East Indian Railway.				Madras Railway.		Great Southern of India Railway.		Bombay Great Indian Peninsula Railway.		Bombay, Baroda, and Central India Railway.		Sindh Railway.	
	Bengal Division.		North Western Provinces Division.											
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Passengers.														
Passengers killed or injured from causes beyond their own control.	–	–	2	–	–	–	–	–	–	5	–	1	–	–
Passengers killed or injured owing to their own misconduct or want of caution.	–	1	–	–	–	–	–	–	–	1	2	–	–	–
Total Passengers killed or injured - - - -	–	1	2	–	–	–	–	–	–	6	2	1	–	–
People connected with the Railway.														
Servants of the Company or of Contractors killed or injured from causes beyond their control.	8	41	–	–	2	–	–	–	1	6	3	2	2	–
Servants of the Company killed or injured owing to their own misconduct, or want of caution.	17	13	4	4	3	1	1	–	11	18	2	–	–	1
Total Railway people killed or injured - - -	25	54	4	4	5	1	1	–	12	24	5	2	2	1
Others, neither Passengers nor Railway Company's Servants														
Trespassers - - - -	3	1	1	–	1	1	–	–	11	4	2	–	1	–
Suicide - - - - -	–	1	1	–	–	–	–	–	1	–	–	–	–	–
Total Persons unconnected with the Railway - -	3	2	2	–	1	1	–	–	12	4	2	–	1	–
Grand Total killed or injured	28	57	8	4	6	2	1	–	24	34	9	3	3	1
Mean Line of Railway open during the year.	Miles 261		Miles 171		Miles 239		Miles 9½		Miles 368 - - - Total - - 541		Miles 107		Miles 66	
Number of Passengers carried -	1,794,889		265,135		1,195,787		65,059		- - - - 4,138,893					

RETURN No. 2.

STATEMENT of ACCIDENTS upon Railways in *India* during 1861, showing the Number of Accidents to Trains and Number of Persons Killed and Injured thereby.

NATURE OF ACCIDENTS.	No. of Accidents.	Passengers or Persons unconnected with the Railway.		CAUSES OF ACCIDENTS.											
				Purely Accidental.	Causes arising from Rolling Stock or Road.				Causes attributable to the Management.				Negligence of Servants.	Improper Interference by persons not under the control of the Company.	Malicious Attempt of Persons not under the control of the Company.
					Neglect of		Defective Condition of		Defective Discipline.						
									Unpunctuality.		Insufficient or inadequately enforced Regulations.	Defective System for securing Intervals between Trains.			
		Killed.	Injured.		Machinery of Train.	Road.	Machinery of Train.	Road.	Accidental.	Defective or inadequately enforced System.					
East Indian Railway, Bengal Division.															
Accidents from engines or carriages leaving the rails.	2	–	–	1	–	–	–	–	–	–	–	–	1	–	–
Accidents from collisions -	4	–	–	1	–	–	–	–	–	–	–	–	3	–	–
Accidents from trains running through facing points.	7	–	–	–	–	–	–	–	–	–	–	–	7	–	–
Accidents from persons in trains being struck against works adjacent to the line.	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–
Accidents, miscellaneous - -	29	3	3	27	1	–	–	–	–	–	–	–	1	–	–
TOTAL - - -	43	3	3	29	1	1	–	–	–		–	–	12	–	–
East Indian Railway, North Western Provinces.															
Accidents from engines or carriages leaving the rails.	1	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Accidents from collisions -	1	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Accidents from trains running through facing points.	2	–	–	–	–	–	–	–	–	–	–	–	2	–	–
Accidents from persons in trains being struck against works adjacent to the line.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidents, miscellaneous -	14	2	–	12	–	–	–	–	–	–	1	–	–	–	1
TOTAL - - -	18	2	–	12	–	–	–	–	–	–	3	–	2	–	1
Madras Railway.															
Accidents from engines or carriages leaving the rails.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidents from collisions -	1	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Accidents from trains running through facing points.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidents from persons in trains being struck against works adjacent to the line.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidents, miscellaneous -	10	1	1	9	–	–	–	–	–	–	–	–	–	–	1
TOTAL - - -	11	1	1	9	–	–	–	–	–	–	–	–	1	–	1
Great Southern of India Railway.															
Accidents, miscellaneous -	1	–	–	1	–	–	–	–	–	–	–	–	–	–	–
Great Indian Peninsula Railway.															
Accidents from engines or carriages leaving the rails.	42	3	3	8	–	5	2	5	–	–	–	–	22	–	–
Accidents from collisions - -	28	–	2	–	–	–	–	–	–	–	8	–	20	–	–
Accidents from trains running through facing points.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidents from persons in trains being struck against works adjacent to the line.	1	–	–	–	–	–	–	–	–	–	1	–	–	–	–
Accidents, miscellaneous.	77	9	5	19	–	34	2	8	–	1	–	–	11	–	2
TOTAL - - -	148	12	10	27	–	39	4	13	–	1	9	–	53	–	2

NATURE OF ACCIDENTS.	No. of Accidents.	Passengers or Persons unconnected with the Railway.		CAUSES OF ACCIDENTS.											
					Causes arising from Rolling Stock or Road.				Causes attributable to the Management.						
					Neglect of		Defective Condition of		Defective Discipline.						
									Unpunctuality.						
		Killed.	Injured.	Purely Accidental.	Machinery of Train.	Road.	Machinery of Train.	Road.	Accidental.	Defective or inadequately enforced System.	Insufficient or inadequately enforced Regulations.	Defective System for securing Intervals between Trains.	Negligence of Servants.	Improper Interference by Persons not under the control of the Company.	Malicious Attempt of Persons not under the control of the Company.
Bombay, Baroda, and Central India Railway.															
Accidents from engines or carriages leaving rails.	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Accidents from collisions	3	–	1	1	–	–	–	–	–	–	–	–	2	–	–
Accidents, miscellaneous	9	4	–	8	–	–	–	1	–	–	–	–	–	–	–
TOTAL	13	4	1	9	–	–	–	1	–	–	–	–	2	–	1
Sindh Railway.															
Accidents from engines or carriages leaving rails.	3	–	–	2	–	–	–	–	–	–	–	–	1	–	–
Accidents from collisions	3	–	–	–	–	–	–	–	–	–	–	–	3	–	–
Accidents, miscellaneous	8	1	–	6	–	1	–	–	–	–	–	–	1	–	–
TOTAL	14	1	–	8	–	1	–	–	–	–	–	–	5	–	–

RETURN No. 3.

STATEMENT showing the Number of PASSENGERS Carried and those Killed or Injured from causes beyond their own control in 1861.

RAILWAYS.	TOTAL NUMBER.		Proportion per Million.		TOTAL Number of Passengers Carried.
	Killed.	Injured.	Killed.	Injured.	
1. East Indian, Bengal Division	– –	– –	– –	– –	1,794,889
2. East Indian, North Western Provinces Division.	2	– –	7·54	– –	265,135
3. Madras	– –	– –	– –	– –	1,195,787
4. Great Southern of India	– –	– –	– –	– –	65,059
5. Great Indian Peninsula	– –	5			
6. Bombay, Baroda, and Central India	– –	1	– –	1·45	4,138,893
7. Sindh	– –	– –			
TOTAL	2	6	·27	·80	7,459,763
Average on Railways in Great Britain, 1852–8	– –	– –	·15	3·20	139,000,000

CHAPTER IX.

BENGAL.

Chap. IX.
Bengal.

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CHAPTER IX.

BENGAL.

ANNUAL REPORT on the Administration of the Bengal Presidency, during the Year 1861-62.

SECTION I.—JUDICIAL.

CIVIL JUSTICE.

Increase of work during the year under review.

The past has been an exceptional year in the administration of Civil Justice. The new limitation law came into operation on the 1st January 1862, and the Courts were much pressed towards the close of the year by the institution of long-outstanding claims, which would otherwise have become barred by the change of procedure. The increase of work thus thrown upon the judicial tribunals was enormous. The number of cases instituted in the Courts rose from 88,684 in 1860 to 275,138 in 1861; and it has been a matter of difficulty for the Courts, in spite of their utmost exertions, to keep pace with this vast influx of cases.

Some idea of the amount of work performed monthly by the Civil Courts may be gathered from the following figures, which are taken from a statement furnished by the Sudder Court for the month of March last:—

Number of cases pending at the commencement of the month -	92,172
Number of cases instituted - - - - - - -	13,480
Number of cases disposed of by the Civil Courts during the month	30,617
Number of cases pending at the close of the month - - -	78,412

Should the rates of disposals to institutions continue at this rate, the whole of the arrears will be cleared off in the course of a few months.

Promptness and despatch in the decision of cases.

The Civil Code of Procedure, which now regulates the conduct of suits in the Civil Courts, has greatly increased the promptness and despatch with which cases are disposed of. The work of each Court is passed in review every month by the highest judicial authority, and any defect or delay in the conduct of business on the part of the local Courts is at once noticed and corrected.

Increase in the number of bond cases, &c.

The increase in the number of bond cases and suits arising out of commercial transactions during the past few years has been most remarkable. In 1856, the year before the mutiny, there were 56,019 suits of this description instituted in the Courts; in 1860, there were 73,778 suits; and during the past year the number rose to 240,769. Much of this, however, is doubtless owing to the exceptional circumstance indicated above.

Value of property under litigation.

The value of property under litigation before the Courts last year amounted to nearly 15,500,000 *l.* These figures merely refer to Bengal Proper, and do not moreover include the value of the suits instituted before the Small Cause Court judges and the revenue authorities.

Effect of the operation of the Code of Civil Procedure.

It was stated in last year's report, that since the introduction of the present Code of Procedure, there had been a very marked decrease in the number of false cases instituted in the Courts, and thence the deduction was drawn that either a check was given by the provision regarding the verification of plaints to the assertion of false and litigious claims, or that just claims were less apt to be defeated by legal technicalities. It will be seen from the figures entered in the following Table that the contrast in the results of cases decided on their merit before and after the introduction of the Code has been more remarkable even last year than in the year preceding:—

Results of Cases decided on their Demerits.

———	Years.	For Plaintiff.	For Defendant.
Before the introduction of the Code - - - -	1858	33,555	18,469
	1859	40,764	20,441
After the introduction of the Code - - - -	1860	60,070	21,763
	1861	125,873	35,794

Results of the year in the Non-Regulation Provinces.

In the Non-Regulation Provinces of Assam, Chota Nagpore, and Arracan,* there has been no perceptible increase or decrease in the amount of litigation. The institution were 13,906 against 14,698 of the previous year. Of suits actually decided on trial, 8,556 were given in favour of the plaintiff, and 2,194 in favour of defendant.

The Calcutta Small Cause Court.

The Calcutta Small Cause Court still continues to enjoy the confidence of the public. Though there was but a small increase in the actual number of suits instituted, the amount of property under litigation was considerably greater than in any previous year on record:—

——	1859-60.	1860-61.	1861-62.
Number of cases instituted	32,287	31,777	33,224
Value of property under litigation	£. 93,500	£. 97,893	£. 111,941

This large increase in the value of property under litigation is mainly attributable to the fact that suits for sums from 200 rupees to 500 rupees have been more numerous than in previous years. Looking at these results as indicative of the confidence reposed in the court by the public, the late Lieutenant-Governor proposed to extend its jurisdiction to all suits for sums of 1,000 rupees; and an Act, with this object in view, is now under the consideration of the Lieutenant-Governor's Council for making laws and regulations.

The financial results of this Court during the past year were most satisfactory. The receipts amounted to 16,110 *l.*, and the expenses to 10,911 *l.*, leaving a clear surplus of 5,199 at the credit of Government.

Working of the Small Cause Courts in the Mofussil.

The Small Cause Courts which were last year established as an experimental measure in the Mofussil had not, at the close of the year, been twelve months in operation; and it would therefore be premature to pronounce definitely upon their success. The amount of work, however, performed by the judges has been very considerable. Their working is indicated in the following Table:—

Number of Small Cause Courts.	Suits Instituted.	Decided.	Stamps and Fees. *Rs.*	*a.*	*p.*
15	28,049	25,416	2,16,185	1	6

CRIMINAL JUSTICE.

Number of persons tried, and the results of the trials.

The number of persons tried for criminal offences during the year was 1,22,619, viz., 1,10,722 in the Regulation Provinces, and 11,897 in the Non-Regulation Provinces.

Of these 81,533 persons were either punished by magisterial officers or committed to the sessions, while 38,010 were acquitted, including those who were discharged without being put upon their trial.

Analysis of the crimes in the Regulation Provinces.

An analysis of the crimes for which the offenders in the Regulation Provinces were tried, shows that a very small proportion were of a heinous nature:—

CRIMES.	Number of Persons Tried.
1. Murder, Wounding with intent to kill, and Culpable Homicide	1,859
2. Dacoity	2,313
3. Highway Robbery	240
4. Burglary, Theft, and Cattle-stealing	11,682
5. Child-stealing	23
6. Receiving stolen property	449
7. Affrays and Riots	1,354
8. Arson (including Incendiarism)	337
9. Forgery and Perjury	973
10. Counterfeiting Coin	35
11. Rape	193
12. Other miscellaneous offences of a trivial character	91,264
TOTAL	1,10,722

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* Since the commencement of the year transferred to Pegu.

A review of the sentences passed on the persons who were punished in the Regulation Provinces exhibits the following results:—

Review of the sentences passed on the persons who were punished.

Released on security, or simply fined		51,969
Dismissed from office		1,970
Flogged		1,371
Sentenced to imprisonment for not exceeding six months		11,372
,,	above six months but not exceeding three years	3,028
,,	above three years but not exceeding sixteen years	1,106
,,	above sixteen years but not exceeding twenty-one years	10
,,	for life	3
,,	to transportation	194
,,	death	47
	TOTAL	71,070

POLICE.

Civil Constabulary.

A thorough reform of the police was determined upon, and partially carried out during the year under review. This reform consists in the substitution of a single body of organized and efficient civil constabulary for the mixed system of a civil and military police, which had hitherto existed in Bengal. The plan was suggested by a Commission appointed by the Government of India to inquire into the several existing police systems throughout India, and the expenditure for Bengal was estimated at 49 lacs of rupees; an opinion being, however, at the same time expressed, that the features of the province and the character and habits of its population, &c., would probably not necessitate a larger expenditure than 40 lacs of rupees. The Government of India has accordingly limited the expenditure to 40 lacs of rupees per year, or any moderate sum in excess of that amount that may be absolutely requisite for the purpose; and a rough estimate (*vide* Statement A 1 in the Appendix), which was prepared by the Local Government for carrying out the scheme, provided for the following force of police for all Bengal, viz:—

		Rupees.
1	Inspector-General	3,000
8	Deputy Inspectors-General of different grades	8,800
25	District Superintendents ditto	14,900
90	Assistant Superintendents ditto	25,000
521	Native Inspectors	51,240
741	,, Sub-Inspectors	15,067
741	,, Overseers	8,892
24,700	Privates	1,72,200
	For Clothing, Arms, and other Contingencies	32,000
		3,31,099
	Or, per Year, - - - *Rs.*	39,73,188

In addition to the foregoing, it was proposed to have, for purposes of purely military protection, either 10 corps of the Line and two corps of Irregular Cavalry, or 10 police battalions of 600 men each and 600 sowars, at an additional cost of 12,97,808 rupees. This part of the scheme, however, was not approved by the Government of India, which has only permitted the retention of some of the military police battalions till the civil police is completely organized; after which they are all to be disbanded, with the exception of such as can be absorbed into the new police or into the regular army, to the latter of which alone will be entrusted the duty of defending the province against either external attacks or serious internal disturbances.

That the carrying out of the new police system might not be delayed, an Inspector-general of Constabulary has been appointed at once on a salary of 2,500 rupees, with three Deputy Inspectors-general, whose divisions correspond with the Commissionerships or civil divisions of Patna, Bhaugulpore, and Assam. District superintendents and assistant superintendents have also been appointed for these divisions, and the latter have been authorised to take immediate steps for the enlistment of subordinate officers and men.

Military police.

On the 1st January 1862 the strength of the military police battalions consisted of 55 European officers and 9,468 Natives of all ranks.

The duties of the police battalions have been performed in a very satisfactory manner. The 8th battalion especially has had much harassing work in connexion with the disturbances in Sumbulpore.

Calcutta and suburban police.

The amalgamation of the Calcutta and suburban police was noticed in last year's Report, and the result has been very satisfactory. The scheme was at first looked upon with some disfavour by the people; but the number of applications of every description made daily to the various police-stations is a proof that it is generally approved of. The number of persons who passed through the hands of the Calcutta and suburban police was 5,185, and of these 4,186 were convicted. The value of property robbed and stolen was 58,000 rupees, out of which 19,000 rupees, or nearly one-third, was recovered. With a view to facilitate the prosecution of cases, an additional magisterial officer for the suburbs has been appointed, and located at Sealdah.

Revision of magisterial establishments.

A revision of magisterial establishments in Bengal was carried out during the year, with a view to effect a reduction of expenditure. The measure was suggested by the Civil Finance Commission, and such of their recommendations as could be entertained without detriment to the interests of the Public Service have been adopted by Government. The total saving effected by the changes determined upon will be *Rs.* 36,525. 11. 0.

A statement in the Appendix (A 2) shows the number and cost of the magisterial establishments of mohurirs and head-clerks, as they stood before and as they have been since revised. Another statement (A 3) exhibits the classification and entire strength of all the revised magisterial establishments in the vernacular departments.

PRISON DISCIPLINE.

Number of prisoners in custody, and cost of maintaining them.

The number of prisoners in custody during the year was 66,526, as under:—

	Males.	Females.	TOTAL.
Number remaining in gaol on the last day of the preceding year - - - - - - - -	16,348	511	16,859
Number admitted during the year - - - -	48,396	1,271	49,667
TOTAL - -	64,744	1,782	66,526

The entire cost on account of these prisoners amounted to *Rs.* 5,61,924. 12. 9., or an average of *Rs.* 33. 7. 10. per prisoner. A statement (B.) in the Appendix exhibits the total and average cost of the prisoners at different periods from 1815-16.

Maximum and minimum rates of expenditure.

The most economical gaol was that at Tirhoot, in which each prisoner cost on an average *Rs.* 20. 4. 6.; while the most expensive was the gaol at Pooree, at which the cost per prisoner was *Rs.* 88. 1. 4.

Disposal of prisoners.

The number of prisoners sentenced to labour was 14,888, and they were disposed of as noted below—

Inefficient from age - - - - - - - -	292
Sick in hospital - - - - - - - -	923
Excused labour on Sundays and holidays - - -	1,488
Employed as gaol servants - - - - - -	1,732
,, as gaol guards - - - - - - -	142
,, on the roads - - - - - - -	104
,, on miscellaneous work - - - - - -	769
Hired by the Department of Public Works - - -	143
,, by other departments - - - - - -	348
Employed on ordinary manufactures - - - -	8,743
,, in the Alipore Gaol Press - - - -	204
TOTAL - - -	14,888

Result of the labour of prisoners.

Subjoined is the result of the labour of the prisoners who were engaged on ordinary manufactures:—

	Rs.	*a.*	*p.*
Value of manufactures sold - - - - - - - - - -	3,77,206	5	4¾
,, articles consumed for public purposes - - - - -	9,490	14	0¼
,, ,, in store at the end of the year - - - - -	65,421	6	9½
Total - - - -	4,52,118	10	2½
Deduct value of manufactured articles in store at the close of the past year - - - - - - - - - - - - -	75,784	2	10
Gross Receipts - -	3,76,334	7	4½
Deduct charges - - - - - - - - - - - -	1,70,875	15	5¼
Net Profits - - -	2,05,458	7	11¼
Net profits of the previous year - - - - - - - -	1,92,131	4	0
Excess of Profits in the year under review - - *Rs.*	13,327	3	11¼

The gaols which contributed most towards this out-turn were those of Hooghly, Alipore, and Jessore, in the two first of which the profits from manufacture more than covered the cost of all the prisoners in custody. At Jessore each handicraftsman earned more than he cost.

Net expenditure.

The net cost of the prisoners is exhibited below:—

	Rs.	a.	p.	Rs.	a.	p.
Gross cost of the year - - - - - - - - - - -				5,61,924	12	9¾
Deduct from this :						
Net profits on manufactures - - - - - -	2,05,458	7	11¼			
" from Alipore Press Department - -	2,09,603	5	3			
Credited to gaols for hire of convicts - - -	11,705	4	8			
Amount of fines collected in commutation of labour -	27,306	15	0			
				4,54,074	0	10¼
Net Cost - - - Rs.				1,07,850	11	11½

The return made to the State from the Gaol Department, therefore, was about four-fifths of the expenditure incurred, which shows that even now, without central gaols, the prisons of the Lower Provinces are nearly self-supporting.

Mortality.

The number of deaths during the year was 1,535, to 2,440 of the preceding year; and the causes of the casualties were as follows:—

Dysentery - - - - - - -	558
Diarrhœa - - - - - - -	212
Cholera - - - - - - -	232
All other diseases - - - - -	505
Other causes (accidental or suicidal) - -	28
Total - - - £.	1,535

Proportion of educated to uneducated prisoners.

The proportion of educated to uneducated prisoners is exhibited below:—

	Total Number of Prisoners admitted during the Year.	Prisoners fairly Educated for their Position in Life.	Prisoners who could only Read and Write.	Prisoners altogether Ignorant.
Males - - - - - - -	48,396	578	3,508	44,310
Females - - - - - -	1,271	- -	5	1,266
Total - -	49,667	578	3,513	45,576

Escape of prisoners.

The number of prisoners that escaped was 211. Of this number 110 were recaptured, the cost of their re-apprehension amounting to 1,304 rupees.

Introduction of a new diet table.

A new diet table, prepared by Doctor Mouat, has been ordered to be introduced experimentally in the gaols of the Lower Provinces for six months. The principal feature of this table is that, instead of prescribing one uniform diet for all classes of prisoners, it divides the prisoners into different classes, each having a distinct dietary of its own, and that it fixes the quantity and quality of food (which was hitherto more in quantity and better in quality than the food consumed by the poorer classes of the people, who form the bulk of the prisoners) to the minimum amount sufficient to keep the prisoners in health. The new system was to come into operation from 1st May 1862.

Gradual abolition of paid kamjaree burkundauzes.

The advisability of gradually introducing trustworthy convict burkundauzes in the places of the extra men hitherto employed in watching the prisoners employed intramurally in guarding the interior of gaols was also considered during the year, and it was determined that in all gaols where extramural labour is not specially sanctioned, the services of paid warders and overseers should be dispensed with, as far as possible, and convicts appointed in their room to superintend the labouring prisoners, to preserve order in the wards at night, and to trim the night-lamps, &c.; the prisoners thus placed in trust being respectively designated peons, kamjaree burkundauzes, and khiliburdars, and being allowed one pice of extra food daily out of the profits of gaol manufacture. A circular to this effect has accordingly been addressed to all magistrates by the Inspector General of Gaols, and, as a preliminary measure, the number of paid burkundauzes has been ordered to be reduced to the rate of one warder for 20 prisoners.

SECTION II.—LEGISLATIVE.

On the 17th of January 1862 a proclamation was issued by the Governor General in Council, extending the provisions of the Act XXIV. & XXV. Vict., c. 67, to the Bengal Division of the Presidency of Fort William, and authorising the nomination by the Lieutenant Governor of twelve councillors for his assistance in making laws and regulations. The Lieutenant Governor thereupon named twelve councillors, whose nomination was approved of by the Governor General. They consisted of four official European gentlemen, four unofficial European gentlemen, and four Native gentlemen, two of whom were official; the provision of the law, which required one-third of the councillors to be non-official, being thus fully complied with. The Governor General in Council at the same time sanctioned the rules for the conduct of business in the Council which the Lieutenant Governor had submitted, and he also sanctioned the appointment of a secretary to the Government of Bengal in the Legislative Department. The rules for the conduct of business were based partly on the Standing Orders of the late Legislative Council of India, but chiefly on the rules for the conduct of business in the Council of the Governor General for making Laws and Regulations; and they were framed so as to suit a council which was not to sit permanently, but was to be called together for occasional sessions, when projects of laws had been prepared.

The first meeting of the Council of the Lieutenant Governor of Bengal for making Laws and Regulations took place on the 1st of February, and the Council continued to meet regularly every Saturday from that date up to the 3rd of May, when it was adjourned *sine die.*

The following Acts were passed during the Session :—

Act I. of 1862.—A Bill with a similar object was introduced into the late Legislative Council of India in the year 1859, but was rejected on the second reading, on the ground that sufficient reasons for passing it had not been advanced. Further instances having occurred proving the necessity of a law for compelling every vessel to show her number, a Bill for that purpose was brought in and passed without any opposition.

An Act to enforce the hoisting of signals of the names of vessels passing signal stations established on the River Hooghly and the branches thereof.—Received the assent of the Governor General on the 14th April 1862.

Act II. of 1862.—Under the original Act establishing Small Cause Courts in the Mofussil, only persons who at the time of the commencement of the suit "dwell or personally work for gain" within the local limits of the jurisdiction of the Court could be sued in it; but by Act II. of 1862, every such court now has jurisdiction also over all persons who, *through their managers, agents, or servants,* carry on any business or work for gain within its local limits.

An Act to amend Act XLII. of 1860, for the establishment of Courts of Small Causes beyond the local limits of the jurisdiction of the Supreme Courts of Judicature established by Royal Charter.—Received the assent of the Governor General on the 14th April 1862.

Act III. of 1862.—This Act was introduced in the belief that the important provisions of the Sale Law regarding the registry of under-tenures and farms, the opening of separate accounts for shares of entire estates, and for the deposit of money or Government securities, had not been taken general advantage of, partly from the high rate of fees prescribed, but chiefly from ignorance of the existence of the law. The time for registering under-tenures and farms (which, under Act XI. of 1859, expired on the 4th day of March last) is by this Act prolonged for three years, and at the same time the scale of fees is reduced.

An Act to amend Act XI. of 1859, to improve the law relating to sales of land for arrears of revenue in the Lower Provinces under the Bengal Presidency.—Received the assent of the Governor General on the 21st April 1862.

Act IV. of 1862.—This Act was passed to remedy the serious inconvenience caused by the divided jurisdiction over the Great Gaol heretofore exercised by the sheriff and the Commissioner of Police. The entire superintendence of that part of the gaol called the House of Correction is by this Act vested in the Commissioner of Police, or any other officer whom the Government may appoint, the authority of the sheriff continuing over the rest of the gaol. The Government is authorised to frame rules for the discipline, &c. of the prisoners, and the superintendent of the House of Correction and the sheriff are respectively empowered to award certain specified punishments for mutinous, violent, or contumacious conduct. Provision is also made for the appointment of visiting magistrates, and for the more severe punishment by them of refractory prisoners who are guilty of repeated offences.

An Act for the better enforcement of discipline in the Great Gaol at Calcutta.—Received the assent of the Governor General on the 1st May 1862.

Act V. of 1862.—For the due security of life and property, this Act provides for the survey twice a year, by competent surveyors, of all steam-vessels plying on the Hooghly or on any of the waters of Bengal, and of British steamers plying between Calcutta and any Indian port; and it also empowers the Lieutenant Governor, in special instances, to order the survey of any other British steamer. Provision is made for the payment of fees to the surveyors for every survey they make.

An Act to provide for the periodical survey of steam-vessels in the Port of Calcutta.—Received the assent of the Governor General on the 1st May 1862.

An Act to amend Act X. of 1859, to amend the law relating to the recovery of rent in the Presidency of Fort William in Bengal.—Received the assent of the Governor General on the 1st May 1862.

Act VI. of 1862.—The object of this Act is to introduce certain amendments of the Rent Law, which practical experience showed to be necessary, and the want of which had been much complained of. The most important provisions of the Act are—(1), those by which damages, to the amount of 25 per cent. on the rent decreed, may be awarded to the plaintiff in any case in which the defendant has, without reasonable cause, refused or neglected to pay the amount due; (2), those by which a plaintiff who improperly institutes a suit may be ordered to pay to the defendant, by way of compensation, a sum not exceeding 25 per cent. on the amount sued for; (3), those by which any ryot whose tender of payment of rent has been refused may deposit the amount tendered in the collector's office: if it be all that he admits to be due, such deposit will have the effect of a payment to the landlord, who is bound to proceed within six months for the enforcement of any further claim for rent accrued due prior to the date of the deposit; (4), those by which the law is amended as to the measurement of lands in cases in which the lands cannot be identified and the ryots absent themselves; (5), those which make fees to agents and mooktears chargeable as costs of suit.

An Act to repeal Section XXX. of Regulation II., 1819, for modifying the provisions contained in the existing Regulations regarding the resumption of the revenue of lands held free of assessment under illegal or invalid tenures, and for defining the right of Government to the revenue of lands not included within the limits of estates for which a settlement has been made.—Received the assent of the Governor General on the 1st May 1862.

Act VII. of 1862.—The object of this Act is to repeal that portion of the Resumption Law which requires suits, regarding land held or claimed to be held free of assessment, instituted in the civil courts to be referred to the collector for report, and gives the option of instituting such suits in the revenue courts, with an appeal to the civil courts. These suits will now be heard and determined exclusively in the ordinary courts of civil judicature without reference to the collectors for investigation. The Act is restrospective in its effect, and is made applicable to pending suits. An unusually large number of such suits was instituted in the end of last year, owing to the provisions of the new Law of Limitation (Act XIV. of 1859) being then about to take effect; and this Act was passed with a view of relieving the pressure in the collectors' courts, and at the same time simplifying and expediting the procedure in resumption cases.

An Act to improve the system of Zemindary Dawks in the Provinces subject to the Government of Bengal.—Received the assent of the Governor General on the 8th May 1862.

Act VIII. of 1862.—This Act was introduced with a view to improve the state of the dawks, which the zemindars were bound by the old law to keep up, for the transport of letters between magistrates and police-stations. The Act imposes no new liability, but merely commutes the existing liability of the zemindar to provide a sufficient number of bearers and runners into a fixed money-payment. The magistrate or other officer specially appointed by Government will nominate, remove, and pay the dawk-runners, and the general management of the dawks will rest with him, under such rules as Government may from time to time make for his guidance.

The following Bills were introduced, and have been referred to Select Committees:—

A Bill to amend Act XXX. of 1857 (for the levy of Port Dues and Fees in the Port of Calcutta).

A Bill to amend the Law relating to the collection of Tolls on Boats and Vessels passing through certain Canals, Khals, and Nullahs within the tidal limits of the Bay of Bengal.

A Bill to amend the Law relating to the appointment of Registers of Deeds, and for the establishment of Deputy Register Offices.

A Bill to provide for the registration and supervision of Native Passenger Boats in certain parts of Bengal.

A Bill to extend the jurisdiction of the Calcutta Court of Small Causes, and to provide for the appointment of Assistant Judges of that Court.

A Bill to authorise the imposition of fines for Outrages and Trespasses committed by inhabitants of villages or members of communities in the Provinces subject to the Government of Bengal.

A Bill for regulating Public Conveyances in the Town and Suburbs of Calcutta.

A Bill to promote the construction of Lines of Communication as Feeders to Railways, High Roads, Navigable Rivers, and Canals.

A Bill for appointing Municipal Commissioners for the Town of Calcutta, and for levying Rates and Taxes in that Town.

A Bill for the Conservancy and Improvement of the Town of Calcutta.

On the 8th March leave was given to bring in a Bill for the registration and safe custody of Wills, Testamentary Documents, and Powers of Adoption executed by Hindoos in the Lower Provinces of Bengal; but at the next meeting, on the motion that the Bill be read in Council, the motion was, on a division, negatived and the Bill thrown out.

SECTION III.—REVENUE.

LAND REVENUE.

Results of the year.

The aggregate results of the year, as compared with those of four previous years, were as under, and show a steady increase in the current demand:—

YEARS.	Current Demand.	Total, including Arrear Demand.	Collections.	Remissions.	Balances.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1846-47 - - -	3,53,08,915	3,91,66,076	3,52,08,488	4,98,185	34,59,403
1851-52 - - -	3,60,69,244	3,99,98,282	3,56,64,099	3,23,172	40,11,011
1856-57 - - -	3,65,79,186	3,98,21,562	3,63,70,224	1,57,587	32,93,751
1860-61 - - -	3,71,21,925	4,03,82,179	3,71,31,641	1,48,903	31,01,635
1861-62 - - -	3,73,55,327	4,04,95,558	3,69,70,626	1,73,084	33,51,848

In the Appendix will be found a statement (C 1) exhibiting the demands, collections, remissions, and balances for the year under review in detail.

Redemption of Government revenue of estates paying one rupee or less.

During the year the Government revenue of 122 estates, paying a sudder jummah of one rupee or less per annum, was redeemed. The aggregate sudder jummah of these estates was *Rs.* 79. 3. 11.; the price paid was *Rs.* 931. 10. 7.

Working of the Rent Law.

The institutions of rent suits under Act X. of 1859 were 1,38,940 against 60,279 of the previous year. The law is now well known, and there is no reluctance on the part of either landlord or tenant to make use of it. Constant supervision has been exercised to prevent unnecessary delay in the decision of suits; and whenever a considerable number have been pending more than two months at any place or places, owing to the sudden and extraordinary influx of cases at certain periods, deputy collectors have been promptly appointed or transferred from one district to another to meet such sudden pressures.

Of the whole number of institutions in the Lower Provinces, no less than 36,339 were in the districts of Nuddea and Jessore, which, from circumstances originating in the indigo disputes, are virtually undergoing the process of resettlement under the operation of the Rent Law, nearly every tenant's right being subjected to a judicial decision.

Operation of Act XI. of 1859.

The extent to which recourse was had to the provisions of Act XI. of 1859, for opening separate accounts, and for registration of tenures during the year, and since the passing of the Act, is shown as under:—

	In 1861-62.		To end of 1861-62.	
	Admitted.	Rejected.	Admitted.	Rejected.
Applications for opening separate accounts under Section X.	128	108	516	196
Applications for opening separate accounts under Section XI.	24	7	54	7
Applications for common registry of tenures under Section XL.	56	17	97	29
Applications for common registry of tenures under Section XLIII.	4	- - -	5	—
Applications for special registry of tenures under Section XL.	38	29	47	34
Applications for special registry of tenures under Section XLIII.	- - -	4	2	4

There was reason to believe that the scale of fees prescribed by the Act for the registry of petty tenures pressed on proprietors so severely as to debar them from registering. This has been obviated by Bengal Act No. III., by which the fees have been reduced to 5 per cent. on the annual rent.

The provisions of Act XI., relating to the recovery of arrears of revenue, have been working satisfactorily.

Sale of Government Khas Mehals.

The result of the sale of Government Khas Mehals is shown in the following Table:—

	Number of Estates sold.	Sudder Jummahs.	Price realised.
		Rs.	*Rs.*
Up to 30 April 1860-61 - - -	572	2,57,641	26,25,678
During 1861-62 - - - -	1,518	3,52,895	30,40,841
Total - - -	2,090	6,10,536	56,66,519

In this Return are included 108 confiscated estates of Shahabad and Behar. The average price realised during the year was above eight-and-a-half times, and the average of all mehals sold up to the end of the year amounted to nine times the sudder jummah.

Grants of Waste Lands.

A statement (C 2) in the Appendix exhibits the progress made in the grant of waste lands under the old Darjeeling and Assam rules. Forty-eight grants, embracing an area of 1,24,850 beegahs, were settled under the old rules on a present jummah of *Rs.* 555. 11. 10., and an eventual maximum jummah of *Rs.* 37,789. 5.; and 6,912 acres were sold outright, and commuted to freehold, the price realised amounting to *Rs.* 62,425. 14.

Numerous applications were received during the year for the grant of waste lands in Assam and Darjeeling, under the new Resolution of the Government of India of 17th October 1861; but the Rules for assigning the lands had not received the sanction of that Government up to the close of the year.

Resumption and settlement of fisheries.

The results of the resumption and settlement of fisheries are exhibited in detail in the Appendix (Statement C 3). One hundred and forty-six blocks were settled during the year for *Rs.* 9,284. 12. Of 437 suits instituted under Regulation II. of 1819, 144 were decided in favour of Government.

CUSTOMS.

Results of the year.

The net revenue realised from this source during the year amounted to 2,73,23,220 rupees, or 2,732,322 *l.*, out of which the net collections of the Port of Calcutta alone were 2,69,72,377 rupees, or 2,697,237 *l.* The aggregate gross receipts were 2,78,84,998 rupees, of which the receipts on account of salt were 1,45,98,049 rupees. A statement (D 1) in the Appendix exhibits details of the receipts and charges at the several ports respectively, and another (D 2) gives a Comparative Statement of the Customs Revenues for six years.

Shipping and tonnage of the Port.

In the Appendix will also be found a Comparative Statement (D 3) of the Shipping and Tonnage of the Port of Calcutta.

Provision of further accommodation for the storage of bonded salt.

With a view to provide further accommodation for the storage of bonded salt, in addition to that afforded by the temporary golahs at Howrah, three golahs have been rented at Seebpore and a range of godowns at Ghoosery, and placed under the supervision of an official especially appointed for the purpose, in subordination to the Superintendent of Sulkea Golahs.

Duty on damaged and unmerchantable goods.

In compliance with a recommendation of the Board of Revenue, one of the rules of the Customs Department was modified to allow of duty being assessed on the net and not the gross sale proceeds of goods passed through the Custom House as damaged and unmerchantable.

Duty on piece-goods, &c.

The Customs duty on cotton piece-goods was reduced on the 23d of April, by Act XI. of 1862, to 5 per cent., and on twist to 3½ per cent. The duty on tobacco has also been reduced to 20 per cent. *ad valorem*, and on malt liquors to 2 annas per imperial gallon. The following Table exhibits the import of those articles for the year under review, the preceding year, and 1851-52:—

Years.	Cotton Piece Goods, valued at	Twist, valued at	Tobacco.	Malt Liquors.
	Rs.	*Rs.*	*Maunds.*	*Imp. Galls.*
1851-52 - - - -	3,21,11,967	90,79,043	3,814	6,58,412
1860-61 - - - -	5,54,27,380	1,03,29,414	4,033	5,71,392
1861-62 - - - -	5,19,43,037	80,24,137	2,184	9,16,645

The imports in cotton piece-goods and twist were above the average, and the apparent falling-off as compared with last year was owing mainly to the revision of the tariff, which was noticed in last year's report.

Export of saltpetre.

A specific duty of two rupees per maund was imposed on exported saltpetre from the year 1860. This has been a fruitful source of revenue, and there is no indication of this increased duty having acted as a check on the trade. The exports from Calcutta have increased, as will be seen from the following Table; though, doubtless, this favourable result is partly attributable to exceptional circumstances—viz., to low freights and the increased demand for saltpetre in England and America:—

YEARS.	Quantity.	Value.	Net Duty.
	Tons.	*Rs.*	*Rs.*
1859–60 - - - -	25,271	43,30,820	2,92,265
1860–61 - - - -	21,941	59,73,708	11,94,104
1861–62 - - - -	28,656	77,99,957	15,58,376

Trade and Navigation Returns.

As the Trade Returns hitherto published in Calcutta were both inaccurate and clumsy, it was recommended by the Customs Committee appointed in 1860, that measures should be taken for the regular preparation of correct Returns of Trade and Navigation, in accordance with a set of forms which were submitted by them. The Government of India directed the adoption of these forms in all the Presidencies at once. The forms were subsequently modified to some extent in communication with the Board of Revenue and the Chamber of Commerce, and it was finally arranged that the returns should be prepared in the Office of the Board of Revenue, a portion of the Custom-house Establishment being transferred to it for the purpose.

Official publication of daily lists of Imports and Exports.

The Chamber of Commerce having pointed out certain errors in the Trade Returns published by private persons, the sanction of Government was accorded to the official publication at the Custom House of daily lists of Imports and Exports, under the direct responsibility of the Custom-house Authorities.

Privileges granted to the "Messageries Impériales."

The privileges enjoyed by the Peninsular and Oriental Steam Navigation Company in respect to their transactions with the Custom House have been extended to the new French Company, "Messageries Impériales," organized for the postal service between Suez and China.

Entire administration of Customs vested in the Collector.

At the suggestion of the Civil Finance Commission, the entire executive administration of Customs has been vested in the Collector, the decision of appeals in points of law and the auditing of accounts remaining with the Board of Revenue.

SALT.

Results of the year.

There was a decrease in the clearance of salt to the extent of 24,12,193 maunds, as compared with the results of the preceding year.

The total quantity cleared during the year was 62,48,803 maunds, as shown in the following statement, and the net revenue derived from this source amounted to 1,56,59,969 rupees, or 1,565,996 *l.*:—

	Maunds.
Government salt, full taxed - - - - - - -	7,63,697
" sold by retail and local sales - - -	8,67,151
Sea-imported salt - - - - - - - -	45,92,705
Excise salt - - - - - - - - - -	25,250
TOTAL - - -	62,48,803

A Comparative Statement (E.) of the sales and the financial results of the year will be found in the Appendix.

Consumption of salt.

The decrease in clearances to the extent of 24 lakhs does not, however, necessarily indicate a falling-off in consumption to that amount. To form even an approximate estimate of the actual purchases for consumption, it is necessary to take into consideration the quantity of sold salt in the hands of dealers at the commencement and at the end of each year. This will be seen from the following figures:—

May to April - - - - -	1860-61.	1861-62.
	Maunds.	*Maunds.*
Sold salt remaining uncleared on 1st May - - - -	1,41,843	8,04,659
*Salt sold during the year - - - - - - -	86,60,996	62,48,803
	88,02,839	70,53,462
Deduct sold salt uncleared on 30th April - - -	8,04,659	44,825
TOTAL - - -	79,98,180	70,08,637

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* Wholesale and retail sales, including imported and excise salt.

Chap. IX.
Bengal.

Thus explained, the quantity of Bengal salt consumed was, apparently, in 1860-61, 79,98,180, and in 1861-62, 70,08,637 maunds. The falling-off was therefore 9,89,543 maunds instead of 24 lakhs. Much of this falling-off may be attributed to the importation of salt from the North-Western Provinces, in favour of which there is a differential duty of four annas per maund; and it is also partly attributable to large stocks in the hands of dealers in the interior at the close of last year, of the actual extent of which no accurate information can be obtained.

Increase in the sale of foreign salt.

During the past year the salt trade has undergone a marked change, as regards its source of supply. The salt produced in the country under the system of Government manufacture has been displaced in the market by foreign salt, principally imported from Liverpool. The extent to which this has occurred will be apparent from the statement of sales of full-taxed salt given below:—

Years.	Government Salt.	Foreign Salt.
	Maunds.	*Maunds.*
1840-41 - - - - - - -	40,72,534	5,73,998
1850-51 - - - - - - -	28,25,101	26,01,034
1860-61 - - - - - - -	45,58,540	30,59,759
1861-62 - - - - - - -	7,63,697	45,92,795

This change will seem remarkable when contrasted with the strong preference hitherto evinced for the Government salt, a preference which was even last year so marked, as to have led to much discussion as to the best means of obviating the great inconvenience which was experienced from a rush of purchasers whenever favourite descriptions of Government salt were offered for sale. The preference for Government salt was founded chiefly on a prejudice amongst the Hindoos against salt carried in ships and made by processes with which they were unacquainted. This prejudice has now been completely overcome, and the cheapness during the past year of the Liverpool salt, as compared with Government salt, has, perhaps, not been the least active agent in bringing about the change. From a variety of causes, such as the closing of the trade in salt between England and the Southern States of America, very low freights arising from the American war, a great falling-off in the shipments of railway materials and other dead freight, the Liverpool salt has been imported on a scale hitherto altogether unprecedented, and at prices correspondingly low. It has been sold largely at 65 to 75 rupees, whilst the fixed price of the Government salt was at the depôts 83 rupees per 100 maunds.

Salt exported to Calcutta, twelve months ending December

	Tons.		Tons.
1847 -	26,021	1855 -	77,487
1848 -	16,508	1856 -	94,487
1849 -	27,793	1857 -	80,510
1850 -	37,579	1858 -	71,070
1851 -	63,627	1859 -	32,685
1852 -	38,789	1860 -	1,06,642
1853 -	13,223	1861 -	1,68,745
1854 -	20,023		

Advantage resulting therefrom.

This change has been viewed with great satisfaction by Government. So long as salt is supplied in abundance to the consumer, and the interest of Government in the sale of salt is limited to the realisation of duty imposed at an equal rate on all salt sold, it is a matter of little importance, so far as the revenue is concerned, whether the salt consumed is imported or home-manufactured, and it is obviously an advantage that the people should be supplied with this necessary of life at the lowest possible cost. The supply of salt to the consumer during the past year has been more abundant and at lower prices than in any previous year.

Importations from Asiatic ports.

The importations of salt during the past year have shown that we are not dependent on any one country for the supply, no less than 19,88,875 maunds having been imported from Asiatic ports,—Kurrachee, Muscat, Jeddah, Madras, &c.

Stock in hand at the close of the year.

The year closed with a very large stock in hand: the Government salt at the Depôts was

	Maunds.
the Depôts was - - - - - - - - - - - -	57,00,000
The season's out-turn was - - - - - - - - - -	27,96,765
The imported salt, in bond and on board ship, on the 30th April - - -	31,34,442
There was foreign salt known to be afloat up to that date - - - -	13,63,806
Total - - -	1,29,95,013

Steps taken by Government to regulate the manufacture of salt.

This state of things has relieved Government of the responsibility of providing a considerable portion of the salt hitherto manufactured at its agencies. The quantity of salt to be manufactured next season has been fixed accordingly at only nine lakhs of maunds. The Chittagong Agency has been closed, and the Hidgellee and Tumlook Agencies placed under one agent, the manufacture being concentrated on carefully selected sites.

For the future, in settling the quantity of salt to be manufactured by Government in any year, the principle has been laid down of providing for that year a quantity of new Government salt, equal to the quantity of Government salt sold during the previous year. In this way, even if importations received a check from the effects of war, high freight, or other causes, no scarcity of salt could arise before extraordinary provision could be made against it.

The out-turn of the past season's manufacture, as far as can be ascertained up to the latest date, was 27,96,765* maunds. The quantity of salt made under excise license was 38,345 maunds. The number of persons holding excise licenses was three.

	Maunds.		Maunds.
*Tumlook -	6,50,270	Cuttack -	2,93,267
Hidgellee -	8,43,700	Pooree -	2,07,797
Chittagong	3,17,991		
Balasore -	4,83,740	Total -	27,96,765

Abolition of the practice of selling sal at a reduced price in particular places.

The practice of selling salt in the manufacturing districts at a reduced price has been abolished. It had hitherto been permitted, under an impression that it was necessary for the prevention of smuggling in the saliferous tracts; but after much inquiry, it was concluded that no such necessity existed, and that, at any rate, the addition of the difference between the reduced and the full price was not likely to increase smuggling to an extent in any way equivalent to the amount of loss sustained by Government by selling at reduced prices. The reduced rates have therefore been done away with in all the Bengal agencies, and will be extended to the Cuttack Agency as soon as arrangements can be completed for shutting out the cheap Ganjam salt. The price of boiled salt in chowkey limits has in the meantime been raised in Cuttack to the Golah rates, which are 3-12 rupees per maund in Balasore, and 3-4 rupees per maund in Cuttack and Pooree.

Sale of Pungah salt a a uniform price.

The new system introduced last year of offering Government salt for sale at a uniform price has been ordered to be continued. All Pungah salt of Government manufacture will therefore be sold at one and the same price, except that the cost of conveyance from the agency to the Sulkea Golah will only be charged on salt actually transported to that depôt.

Questions pending at the close of the year.

Two important questions were awaiting the decision of Government at the close of the year—viz., the establishment of a cordon between Madras and this presidency to keep out cheap Ganjam salt, and the proposal of the late Mr. Wilson to tax the (Puckwa) salt educed in the making and refining of saltpetre.

Magisterial officers vested with the power of adjudicatin cases connected wit the infraction of th Salt Laws.

An important functional change has been effected in the Preventive Service since the close of the year, the chowkey subordinates having been relieved of all judicial functions in cases of infraction of the Salt Laws, and the magistrates and deputy magistrates in the salt preventive districts vested with the powers of adjudication referred to in Regulation X. of 1819, and Act XXIX. of 1838. The preventive officers are thus relieved of all office and routine work, and enabled to devote their whole time to the performance of their more legitimate duties.

OPIUM.

Results of the year

The net amount of revenue derived from opium during the year was 2,46,84,216 rupees, or 2,468,421 *l.* In the Appendix will be found a Comparative Statement (F 1) exhibiting the receipts, charges, and net revenue of seven years.

Abkarry opium.

The net revenue derived from the sale of abkarry opium was 13,41,200 rupees. The cost of this opium to Government has hitherto been shown in account at *Rs.* 5. 8. per seer, but will henceforward be exhibited at *Rs.* 7. 4. per seer, in consequence of increased cost of manufacture. The prices at which the drug is to be supplied to licensed vendors are exhibited in a statement (F 2) inserted in the Appendix. With the higher prices now fixed, and the substitution of Government opium for the untaxed indigenous drug in Assam, a considerable increase of revenue may be expected from this source.

Manufacture of opium during the season of 1861–62.

The prospects of the season 1861–62 for the manufacture of opium were most promising at the outset; but the heavy rain and storms which occurred in the month of March throughout the opium districts did serious injury to the cultivation. Notwithstanding this, an out-turn of 22,314 chests of provision opium has been manufactured in Behar, and it is expected that the out-turn in the Benares Agency will not be less than 17,000 chests, making a total of nearly 40,000 chests, or about 10,000 chests more than the provision of the previous season.

Result of the concessions made to cultivators.

It was noticed in last year's Report, that the price paid to cultivators for crude opium had been increased from four to five rupees a seer. Besides this, loans of money were also given to the cultivators for the purpose of enabling them to sink wells, to provide the means of irrigation. The result of these arrangements has been a great extension of the cultivation for the season, as will be seen from the following statement:—

Land engaged in Behar and Benares Agencies.

	Behar.	Benares.	Oude.
	Beegahs.	*Beegahs.*	*Beegahs.*
1860–61 - - -	3,46,675	1,40,758	13,398
1861–62 - - -	4,20,871	1,90,152	28,410
Increase - - -	74,196	49,394	15,012

Rules for opium weighments.

A revised code of rules for the conduct of opium weighments has been prepared by Mr. Pughe, of the Gya Sub-Agency, which promises to be of great use to the department.

Cultivation of opium in Budaon, Shahjehanpore, and Rohilcund.

The cultivation of poppy was experimentally tried in the districts of Budaon, Shahjehanpore, and Rohilcund during the season 1860-61; and the measure having fully succeeded, steps were taken for extending the operations in those districts during the season 1861-62.

Introduction of the agency system in Oude.

The agency system was introduced into Oude in 1860-61 with the greatest success. 13.344 beegahs were cultivated the first year; the average yield was as high as eight seers per beegah. This year a much larger area was under cultivation; the produce at the average yield was not so high.

EXCISE.

Results of the year.

The net revenue derived from excisable articles during the year was 46,82,628 rupees, or 468,262 *l.*, of which 12,75,394 rupees were derived from excise opium, and 34,07,234 rupees from spirits and drugs other than opium. A statement (G 1) will be found in the Appendix, showing the collections and charges in detail.

Net increase of revenue.

The total net revenue of the previous year was 40,43,264 rupees, so that the net increase in the year under review was 6,39,364 rupees, of which 2,91,652 rupees was from opium, and 3,47,712 rupees from other drugs and spirits. The annual net excise revenue was in 1851-52 only 22,70,959 rupees; it has therefore more than doubled in the last decade.

Increase in the proceeds of opium accounted for.

The great increase in the proceeds from opium was owing to the cultivation of Kanee opium in Assam having been put a stop to since the beginning of the previous year, and to the Assamese having resorted to the use of the duty-paid drug on their old stores of Kanee having run out.

Extension of the Sudder Distillery system.

In the management of the spirit excise, the principal feature of the year was the further substitution of the Central Distillery or Fixed Duty System, for the system of daily tax on outstills and shops. The following Table shows the progress which has been made in displacing the daily tax system in each division:—

DIVISIONS.	Number of Sudder Distilleries established.			Approximate Area supplied by Sudder Distilleries on 30th April 1861.	Number of Distilleries of which the Establishment has been sanctioned, but not yet carried out.
	Before 1861-62.	In 1861-62.	TOTAL.		
Bhaugulpore - - -	2	4	6	6,030	3
Burdwan - - -	8	8	16	1,396	—
Chittagong - - -	–	1	1	2,717	2
Cuttack - - -	2	–	2	634	3
Dacca - - - -	2	18	20	21,622	1
Nuddea - - - -	10	1	11	8,527	—
Patna - - - -	1	–	1	40	17
Rajshahye - - -	–	7	7	30,711	11
TOTAL - - -	25	39	64	71,677	37

Increase in the consumption of rum.

The reduction of the duty on rum to 2-4 rupees per gallon was noticed in last year's Report. This was followed by the increase of the duty on native spirits to the same rate, and the result has been an immediate fall in the consumption of native spirits, and an increase in the consumption of rum. A statement (G 2) in the Appendix compares the sale of rum and native spirits in Calcutta during each of the quarters of the year under review, and shows to what extent the consumption of rum is displacing that of country spirits.

Decrease in the consumption of ganjah.

The measure of doubling the duty on ganjah was also noticed in last year's Report, and has proved very successful; the consumption of the drug having decreased by 6,790 maunds, while the revenue has increased by 1,55,976 rupees.

STAMPS.

Gross collections.

A statement (H), showing the gross collections from stamps during the year under review, as compared with the years 1846-47, 1856-57, and 1860-61, will be found in the Appendix. The returns from two Bengal districts, and five districts under other Governments, have not been received.

The gross receipts for the year were 1,06,00,483 rupees (as will be seen in the following statement), or 1,060,048 *l.*; and, compared with the previous year, exhibit an increase of 29,46,579 rupees. Much of this increase is doubtless due to the operation of the new Law of Limitation, which came into force during the year:—

	Rs.	a.	p.
Bengal	55,27,531	8	6
North Western Provinces	25,63,166	–	–
Punjab	9,58,113	7	–
Central Provinces	1,16,572	4	–
Oude	2,75,704	2	–
British Burmah	1,47,302	8	–
Berar (Booldanah)	24,328	2	6
Town of Calcutta	9,87,765	–	–
TOTAL - - - Rs.	1,06,00,483	–	–

Duty on deeds stamped under Act XXXVI. of 1860.

The number of unstamped and insufficiently stamped documents stamped under the provisions of Act XXXVI. of 1860, was 3,719; and the amount of duty and penalty realised was 68,078 rupees.

The gross collections from postage-stamps in Bengal and other places, was 9,89,662 rupees; and the value of postage-stamps supplied to Madras and Bombay, was 2,65,350 rupees and 6,10,350 rupees respectively.

Collections on account of Postage Stamps:—

	Rs.	a.	p.
Bengal	4,34,510	10	4
North Western Provinces	2,83,825	3	3
Punjab	1,36,003	–	6
Oude	31,146	13	3
Pegu	29,027	3	6
Straits Settlements	75,149	5	8
TOTAL - - - Rs.	9,89,662	4	6

Machinery.

All the machinery of the Stamp Office is now driven by steam-power.

INCOME TAX.

Collections in the Mofussil.

The amount of income-tax realised during the year in the Mofussil districts was 44,78,000 rupees, and the charges on account of collection were 4,56,000 rupees. The net receipts, therefore, from 1st May 1861 to 30th April 1862, were 40,22,000 rupees. Of this, however, 32,78,000 rupees were on account of the income-tax assessments of the previous year. The working of the income-tax for the first year of its imposition will be apparent from the following statement in round numbers:—

	Rs.
The first income-tax year yielded	48,00,000
Of which up to the close of this (financial) year there had been assessed	47,50,000
Of this sum the collecting establishments have realised	44,25,000
At a cost of	6,40,000
Giving a net yield, so far, of	37,85,000
And leaving a demand, say, net	3,25,000
Which makes net yield of the first year's tax	41,10,000

The private incomes assessed in the first year of the tax were very nearly as follows:—

	Private Income.	Yielding Tax of
	Co's. Rs.	Co's. Rs.
4 per cent.	9,50,00,000	38,00,000
2 ditto	5,00,00,000	10,00,000
TOTAL - Co's. Rs.	14,50,00,000	48,00,000

The amount of official incomes assessed, and the assessment thereon during the same period, appear on an average calculation to have been 1,04,90,020 rupees and 3,94,233 rupees respectively.

The income-tax came into operation from August 1860, and the second year of the tax, therefore, extends to the 31st July 1862. The estimated revenue for this year is 44,98,897 rupees; and the progress made in the assessment and collection of that sum up to the 30th of April last is exhibited in detail in a statement (I 1) which will be found in the Appendix.

Collections in Calcutta and its suburbs.

In Calcutta and its suburbs the total assessments, from the commencement of the working of the tax to the closing of the financial year under review, amounted to 19,45,155 rupees, and the total collections, to 15,66,299 rupees. The collections for the three quarters ending on the 30th April last were 4,00,298 rupees, and the charges for the year ending on that date were 1,48,206 rupees. A statement (I 2) of the progress made in assessment and collection from the commencement of the operation of the tax is given in the Appendix.

Changes introduced after the closing of the year.

After the close of the official year an Act was passed, exempting, from the 1st of August next, incomes under 500 rupees per annum from the operation of the tax, and introducing some other changes, the chief of which is a provision empowering the Governor General in Council to permit, in such districts as he may think proper, the assessments for the year 1862-63 to be made at the rate of the preceding year, saving in the case of such taxpayer as shall prefer to be newly assessed. These changes will allow of considerable reductions in the assessing establishments being carried out.

SECTION IV.—FINANCIAL.

Revenue and expenditure of the year.

The Revenue and Expenditure of the year are exhibited in detail in a statement (J) in the Appendix, which embraces the actual results of the first nine months, and the estimated results of the remaining three months. The total receipts amounted to 14,13,23,500 rupees, or 14,132,350 *l.*, while the total disbursements were 4,90,34,100 rupees, leaving a surplus of 9,22,89,400 rupees, or 9,228,910 *l.*

Comparison of results with previous years.

The surplus revenue in 1859-60 was 8,84,83,100 rupees, and in 1860-61 9,66,74,800 rupees; so that, while the results of the year under review are more favourable than those of 1859-60 by 38,06,300 rupees, they exhibit a falling-off, in comparison with the results of 1860-61, to the extent of 43,85,400 rupees.

SECTION V.—EDUCATION.

Contribution of Government for educational purposes.

Although, as shown above, the revenue of the Lower Provinces amounted to 14,132,350 *l.*, something less than 80,000 *l.* was devoted to educational purposes in these provinces during the year, or 0·566 per cent. of the revenue. This sum, distributed over a population of forty millions, gives a charge on the State of less than a halfpenny per head, instead of nearly ninepence per head, as in England.

Schools under Government inspection.

At the close of the year the number of schools under Government inspection was 879, and the number of scholars 52,895, as under:—

Schools and Colleges under Inspection.	Number of Schools.		Number of Pupils.	
Government Institutions.				
Colleges, general and professional - - -	9		1,425	
English schools - - - - - - - -	45		7,417	
Anglo-vernacular schools - - - - - -	7		321	
Vernacular schools - - - - - - -	183	244	10,233	19,396
Aided and other Schools under Private Management.				
English schools (including School of Industrial Art)	35		5,256	
Anglo-vernacular schools - - - - - -	108		6,890	
Vernacular schools - - - - - - -	275		12,138	
Girls' schools - - - - - - - -	15	433	530	24,814
Indigenous vernacular schools under improvement in Central and South-eastern Divisions - -	202	202	8,685	8,685
		879		52,895

These figures give, approximately, one school to a population of 45,506, and one scholar to a population of 756.

Net charges of the Department.

The net charges of the department for the year were estimated at 7,79,748 rupees, the cost to the State for each scholar amounting to *Rs.* 14. 11. 10.

University examinations.

The University examinations continued, on the whole, to exhibit a satisfactory advance in all the higher branches of education.

Entrance examination.

For the entrance examination there were 971 candidates, 436 of whom passed successfully

fully. A statement (K 1) will be found in the Appendix, exhibiting the result in regard to the different classes of schools from which the candidates were drawn.

Examination for junior scholarships.

It was stated in last year's Report, that the junior scholarships would in future be thrown open to the students of all institutions, Government or otherwise, without distinction: 160 scholarships were accordingly competed for during the year, and 155 were awarded*—114 to students in Government institutions, 19 to students of aided schools, and 22 to students of independent schools.

* *Vide* Statement K 2 in the Appendix.

First examination in Arts.

Under the new regulations of the University a first examination in Arts has been instituted, which undergraduates are required to pass at the end of their second year. The first of these examinations was held in January last, when 154 candidates presented themselves, of whom 13 passed in the 1st and 76 in the 2d division. The results of this examination determined the award of the Government senior scholarships, of which 24 are annually open to the students of all institutions affiliated to the University within the limits of the Lower Provinces: 23 of these scholarships were obtained by students of Government institutions.

Examination for the B.A. degree.

The number of candidates for the B. A. examination was 34, of whom 24 passed.

Examinations for the degrees of B.L. and L.L.

The number of candidates for the degree of B. L. was 13, all of whom were successful; and the number of candidates for the degree of L. L. 16, of whom 10 were successful.

Examinations for the degrees of M.D., L.M., and L.S.

The degree of Doctor of Medicine was conferred this year for the first time: it was obtained by Baboo Chunder Coomar Dey, a former pupil of the Calcutta Medical College. For the first preliminary examination in medicine and surgery 33 candidates presented themselves, 16 of whom were successful; and at the final or Degree examination, seven candidates were successful out of 17.

Examination for the degree of L.C.E.

For the degree of L. C. E., there were 18 candidates, of whom 14 passed.

The English colleges and number of students in them.

The distribution of students among the different English colleges was as follows:—

	Monthly Fee.			Number on the Rolls on 1st January 1860.	Number on the Rolls on 30th April 1861.	Number on the Rolls on 30th April 1862.
	Rs.	*a.*	*p.*			
Presidency College - - - -	†10	–	–	122	209	227
Hooghly College - - - -	4	–	–	32	79	66
Dacca College - - - - -	3	8	–	34	76	138
Krishnaghur College - - - -	4	–	–	30	42	38
Berhampore College - - - -	3	8	–	16	16	26
Total - - -	-		-	234	422	495

† Junior scholars pay 5 rupees per mensem.

This exhibits a considerable increase in the number of students. A statement (K 3) showing the classification of the students of the Presidency College, according to the social position and place of residence of their parents, will be found in the Appendix, as well as one (K 4) exhibiting the general classification of all students by the same standard.

Grant-in-aid schools.

The number of schools receiving grants-in-aid from Government was 319, the aggregate amount of the grants being 8,641 rupees per mensem, or, in round figures, 10,369 *l.* per annum.

SECTION VI.—PUBLIC WORKS.

GENERAL.

Administrative changes.

There have been no great changes in the administration of the Public Works Department during the year. The powers of superintending engineers have been very much enlarged; they exercise now nearly the same authority given in the code to chief engineers. The separate office establishments maintained for the Chief Engineer, and for the secretariat of the Public Works Department, have been given up. There is now only one establishment and one record, and a reduction has been made which will allow of the offices of superintending engineers being improved.

Contract system.

2. A sustained attempt has been made to obtain contractors for the execution of public works at schedule rates—repairs as well as new works.

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Bengal.

The contract system has been fairly introduced into the Presidency Circle, and the results will come under review for 1862–63: it is sufficient here to say that the measure promises to be a success, and that the favourable commencement made is owing to the careful manner in which both the public and the department were instructed in the proposed rules for working, and as to the nature, manner, and departmental rates of the several descriptions of work for which, as a whole, tenders were invited. The accepted tenders are for one year, and the rates are but little in excess of the departmental rates.

Contractors have been found for the works in Calcutta within the fort, at Barrackpore and its outposts, for some works on the Calcutta canals, and for an iron bridge over Tolly's Nullah. Tenders are also invited for works in the Burdwan and Cuttack Circles, but there is difficulty in extending a system of contracts on a large scale. The measure cannot be forced, and where large contractors are not forthcoming, the utmost will be done to foster a system of petty contracts, employing beneficially head workmen and artificers, and the energetic men of small or no capital who can command labour. This is the special improvement in the department which is now aimed at, as tending to diminish establishments, to simplify accounts, and to create a very useful class of workers for the department.

Assistance at out-stations.

3. The plan of allowing officials at outposts to undertake the execution of petty works and of repairs, which has been tried with much success in the Punjab, has been extended to Bengal under the orders of the Government of India.

Record of lands.

4. The complete record of Government lands has now been furnished from nearly all the divisions of the department. The exceptions are noted below:—

1. Barrackpore	Complied in part only.	1. Suburban Roads	Not complied at all.
2. Sylhet		2. Dacca	
3. Upper Assam		3. Jessore Road	
4. Midnapore		4. Patna	
		5. Ramghur	
		6. 2d Division, Grand Trunk Road	
		7. Damoodah	

Standard plans.

5. The undermentioned standard plans have been issued during the year:—

I. Subdivisional lock-up for Europeans.
II. Inspection bungalows.*
III. For the internal arrangement and fittings of court-rooms.

* In supersession of previous standards, and on a reduced scale.

Abolition of Iron Bridge Yard.

6. The question of the advantage of maintaining three Government foundries and establishments at the Presidency has been decided in favour of abolishing the Iron Bridge Yard. The iron work for the department will, in future, be supplied from the Cossipore Foundry, and, when necessary, from the private establishments at the Presidency.

Photography.

7. The photographer attached to the Public Works Department in Bengal has, during this year, worked through Hidgellee, Balasore, and Cuttack. Some interesting views have been taken of temples and of public works constructed by the former dynasties in Orissa, as well as of modern works by this Government; but a severe accident prevented completion of the series, and necessitated the photographer's return to Calcutta. Some of the prints are included in the Exhibition of the Photographic Society; and although much is wanting, they show a marked improvement over the work of last year.

Accounts.

8. It is satisfactory to find that the "stock" of the whole department in Bengal has been adjusted by the Central Office of Account up to the 31st October 1860, and that price-lists are now in the hands of executive engineers.

The feeling which has long been expressed by the Executive Department that executive engineers should compile their own abstracts, instead of waiting for the Central Office to do this for them, has found a response in an order permitting the measure to be tested gradually, division by division, at the Presidency; and it is probable that the concession will be extended, as the Officiating Controller has expressed his opinion that "it may be thought advisable, as soon as the price-lists of stock for the current year are in the hands of every executive engineer, gradually to allow every officer who wishes to do so to prepare his own abstracts."

Establishment.

9. The Chief Engineer reports that he has throughout the year had every reason to be satisfied with the exertions made by the officers of the department to do their duty faithfully, and to the best of their ability. Where so much zeal, hearty goodwill, and co-operation have been shown generally, and where there has been, on the whole, so much of good management, and so much effective progress, it is not necessary to particularise exceptions, immediate steps having been taken to remedy matters wherever the progress or management has not been what it should be.

WORKS.

Military.

Very little has been done for the Military Department deserving of special notice. Considerable sums have been spent upon the semi-permanent barracks erected in 1857–60, in repairs, additions, and alterations. At Dehree, work has been suspended, and no further outlay is to be incurred. All new works at Dum-Dum have been suspended, question having been raised as to abandoning this old cantonment. At Raneegunge and at Hazareebaugh, the demand for additional minor works has been frequent. At Hazareebaugh, two new plunge-baths, temporary stables, gun-sheds, and workshops for a battery of artillery have been put in hand. On Mount Parisnath the barrack for 33 men and the bungalow for officers are now ready for roofing, but cannot be covered in before next season, owing to the difficulty of keeping workmen on the hill. In Fort William a new plunge-bath has been built in the cunette of the ditch. The masonry of the Queen's Barrack having shown what were considered to be signs of crushing, the building was carefully examined by a committee of qualified officers, who reported that there was no reason for doubting its stability, but that two of the lower verandah piers showed signs of weakness, and should be rebuilt. These piers were accordingly taken down, supporting, meanwhile, the upper floors; new piers were then built up with great care, the under-pinning, always a difficult matter, being effected in a clever workmanlike manner. Arrangements are in progress for lighting the fort with gas.

Naval.

The steam-hammer and boiler-sheds at Kidderpore (commenced in 1860-61) have been completed, and the machinery is now in course of erection. When the new road outside the dockyard shall be completed, the portion of the old Garden Reach Road superseded by it will be closed to the public; and the whole of the premises, with the additional land purchased in 1860-61, will be enclosed by a masonry wall.

Judicial.

The new cutcherry for the Sudder Ameen at Kishnaghur has been completed. Subdivisional courthouses and residences, on the standard plan, have been commenced in the Nuddea district, at Ranaghat, Choadangah, Bongong, Narail, Jenidah, Kotechandpore, and Satkhiriah, and are well advanced. Similar buildings have been commenced at Kooshtea, the terminus of the Eastern Bengal Railway on the Ganges, and also at Sharpore, in Chota Nagpore.

The new court-houses at Dinagepore for the Judge, and at Monghyr and at Mozufferpore for the Principal Sudder Ameens, have been completed, and some progress has been made in the construction of the Judges' court-houses at Mozufferpore and Chupra.

Alterations have been made in the Calcutta Great Gaol for the safe custody of prisoners, and extensive additions are about to be commenced for the better accommodation and classification of prisoners. A new upper-storied residence for the governor of the gaol is well advanced; the lower story will be used for the guard and for the offices of the gaol. A new gaol hospital at Dinagepore has been completed, and at Bhaugulpore the walls of the gaol have been raised, and new roofs given. Subdivisional gaols, on the standard plan (consisting of a hazut ward with a surrounding wall of masonry), are under construction at Comercolly, Diamond Harbour, Burhee, and Nowgong. At Raneegunge, a small lock-up for Europeans has been commenced.

Revenue.

A new Treasury building has been completed at Gya. At Mozufferpore and at Chupra court-houses for the collectors have been under construction; a new court-house at Hazareebaugh is nearly completed; some additions have also been made to the court-houses at Balasore and Cuttack.

It has been found necessary to construct new floors to the two new Customs sheds at Calcutta. In the first shed the floor was only of concrete, which had not sufficient strength to withstand the wear and tear, and it has been replaced by stone paving; in the second shed the stone paving had been laid on sand; it has now been relaid over brickwork. Extensive repairs and renewals have been completed to the Calcutta Custom-house, and iron gratings have been fixed to numerous archways and openings, to prevent the pilfering, which was very prevalent. At the Goolzarbaugh opium factory, a large chest-shed has been completed, and the west godown has been fitted with drying-racks. A boundary wall is being constructed round the premises. Additional accommodation being required for the bonding of salt at Sulkea, several buildings have been hired and adapted for the purpose. Active preparations are being made for the laying down of iron tramways leading from a new timber jetty to some of the Sulkea Golahs. This work is executed experimentally, and the jetty, which is also under construction, will be provided with cranes to facilitate the unloading of salt from vessels. If these appliances are found to answer well, and to be a success financially, the system will be extended, and the whole of the godowns placed in communication by rails, with landing jetties.

Ecclesiastical.

After obtaining from Mr. Gilbert Scott of London a very beautiful design for a gothic church, to be erected in place of St. James's Church, Calcutta, it was found necessary on the score of expense to set it aside, and to prepare a more simple design, which might be carried into execution for an expenditure not exceeding two lakhs of rupees. This has been done by Mr. C. G. Wray, and the first stone of the church was laid by His Honor the Lieutenant Governor of Bengal, on the 7th June 1862, with all the ceremonies proper to the occasion, and in the presence of a large concourse of spectators.

At Dinapore, funds having been subscribed for adding a tower to the church, the work has been put in hand.

At Cuttack a new church, also designed by Mr. Wray, has been commenced and well advanced during the past season; the walls are already built about 12 feet high, and the work, which is executed in red stone with dressed quoins, is stated to be very well done. Five thousand rupees for the construction of this church were raised by subscription; 10,000 rupees have been added by Government. The church is estimated to cost 15,000 rupees, and will accommodate 112 persons.

Arrangements have been made for the construction of small churches at Cachar, Purneah, Gyah, and Arrah. The churches at Raneegunge and at Bhaugulpore have been taken over from the local committees, and will henceforth be maintained at the cost of Government.

General.

Partial repairs have been made to the surrounding tank and tomb of Shere Shah at Sasseram. It is intended, in fulfilment of the promises make by Government to the inhabitants of Sasseram in 1858, to excavate the bottom of this tank and to rivet the sides. The inhabitants of the town, who chiefly depend upon this tank for their water supply, are desirous that the bottom should be cleansed; and that the waters, which are at present foul and unwholesome, should be wholly renewed.

A second revised design for the new general post office and telegraph offices to be erected in Calcutta has been prepared by Mr. Wray, and the subject of this building, and of the accommodation to be afforded, is now under consideration. Small post-offices have been built at Cuttack, Kishnaghur, Pubna, and Bally.

The new copper mint is the most extensive building which has been in progress during the year, and the masonry has been very successfully built upon a bad sub-soil. The flat roofing is supported by iron girders brought into use from the stock of imported iron for barracks. The laminating room, which is of noble proportions, is to have an iron pent roof, which is being erected; the roof covering is to be of corrugated iron, over pine boarding.

A new landing ghât framed of cast iron has been constructed at the Botanical Garden on the Hooghly river, and it is found to answer well.

Embankments.

Although the care and maintenance of the embankments in Bengal demand so much of the attention of this department, and absorbs a considerable proportion of the total expenditure, there is usually little which calls for special notice. The work of completing the Hidgellee Sea Dyke has not progressed to the extent expected, owing to sickness of the establishment, and to the great difficulty in procuring local labour, whilst salt-making was in operation. Now that the manufacture of salt in Hidgellee has been restricted, it is probable that the progress will greatly increase.

Communications. Metalled road.

Ganges and Darjeeling Road.—Caragolah Ghât to Silligooree, 126 miles. The extension from Titalyah to Silligooree, 18 miles, has been carried out during the year, and forms an excellent direct road. The road from Caragolah is now completely bridged, with the exception of five large rivers; over three of these, preparations have been made for execting timber bridges. All the flood drain bridges have been strengthened or reconstructed, and 3,212 running feet of waterway added. All these works are substantially constructed of sound Saul timber, and will last with care for many years. The cost of these bridges has been 30 rupees the foot forward. It is intended to metal the road for a width of 12 feet from Caragolah to Purneah (30 miles). Stone metal for about three miles has been broken and conveyed to the roadside.

Jeeagunge and Nulhatty Road, 27½ miles.—Earthwork and bridges on this road completed, with exception of the Ghumberah Nullah. Metal has been spread upon eight miles, and is prepared for the next 16 miles; the remaining three and a half miles cannot be metalled until after the rains. As a continuation of this line, the Imperial road from Berhampore to Jeeagunge, and thence to Bugwangolah, is about to be metalled.

Sooree and Bhaugulpore Road, 110 miles.—Northern section from Bowsee to Bhaugulpore (30 miles) nearly completed; the earthwork and turfing will be finished off during the rains; 44 out of 53 masonry drainage culverts are completed, and the remaining nine nearly so. Thirteen out of 14 lakhs of cubic feet metal have been collected, and the sublayer has been spread over nearly 26 miles of road. Nothing has been done towards extending the formation of the road south of Bowsee during the year, but the road where formed has been repaired, and the whole line has been kept open for traffic.

Patna Branch Road.—Nair to Patna, 36 miles. About 11 miles of earthwork have been roughly completed, and the masonry viaducts on the seven miles of road nearest to Patna have been commenced. This road crosses a heavy flooded country, and in the 19 miles, between the Poopoon river and Jehanabad, it is proposed to leave several wide metalled drains for the passage of floods. There is a want of labour, owing to which the work cannot be pushed on as rapidly as could be wished.

A new line of road is being formed through the worst part of the Dunwah Pass on the Grand Trunk Road, by which the difficulties, and, it may be said, the dangers of the present ghât will be avoided; the gradient on the present line is in places 1 in 14; on the new line it will in no place exceed 1 in 30, whilst the length of the road which was laid out by Major Briggs will only be increased by one furlong.

Hazareebaugh and Burhee Road, 22½ miles.—There still remain 10 miles on which the metal is incomplete, and additions are required to the wing walls of 17 of the old drain bridges. It has been proposed to bridge the four rivers on this road, instead of providing masonry causeways as first sanctioned.

Constructing the Oolabariah and Midnapore Road, 55 miles.—Progress has been slow and not altogether satisfactory; the chief difficulty has been in procuring labour. Nothing has been done to complete the road between Oolabariah and Moisrakha, on account of the canal alongside not being finished. From Moisrakha on the Damoodur to Koela Ghât on the Roopnarain, and from thence to Panchkoorah on the Cossi river, the metalling is about three-quarters completed. From Panchkoorah to Midnapore the whole of the metalling has been completed, and the old metalling repaired.

The Midnapore and Cuttack Road has been taken in hand during the past year. From Midnapore to Rajghat on the Soobunreeka, 49 miles, the road has been raised, and six additional drain bridges have been constructed, preparatory to metalling the road. From

Rajghat, on the Soobunreeka, to the Byturnee river, 90 miles, earth raising and bridges are in active progress; 10 masonry drain bridges, giving 260 lineal feet of waterway, are well advanced. From the Byturnee to Cuttack, 49 miles, earthwork in progress, and also masonry bridges, in opes of 10 and 15 feet span, to the extent of 365 lineal feet. The entire earth raising and bridging of this road will be completed by the rains of 1863, after which the metalling will be taken in hand.

Midnapore and Raneegunge Road, 90 *miles.*—This road, *viâ* Bancoorah and Bishenpore, has been taken up as an Imperial road, and much has been done towards making it a good second-class road. Between the railway terminus and the Grand Trunk Road a new layer of metal, amounting to a re-construction, has been carried out; the traffic on this length is perhaps heavier than on any road in Bengal.

Unmetalled roads.

Jessore Road, 57 *miles.*—The earthwork on this road has been completed; most of the smaller bridges have been finished, but the floods of last year, which were unusually heavy, have proved the necessity for giving additional waterway. Arrangements have been made for procuring from England iron boats, and a creosoted pine platform for the boat bridge which is to be formed across the Issamutty river at Bongong.

Dacca and Chittagong Road, 128 *miles.*—The bridging of the road between the big Fenny and Chittagong has been commenced; the works will be placed in active progress during the next working season.

The Gowhatty to Schillong bridle road, 62 miles, has been commenced, and about half completed. If this new station of Schillong should answer the expectations formed, this road will be opened out as a good cart road.

Attempts have been made to push on the bridging and improving of the Assam trunk road in the Upper Assam Division; but owing to want of labour, very little could be done. Deficiency of labour in Assam has brought all public works to a stand; local rates have been increased to the price for which it was thought that labour could be imported. Steps have since been taken to import labourers from Calcutta.

The Darjeeling Cart Road, from Silligooree to Darjeeling, 62 *miles.*—The importance of opening out a cart road to Darjeeling, through the sub-Himalayan range, in continuation of the road from Caragolah, has been fully recognised, and the practicability of forming a road with a gradient not exceeding 1 in 30 has been proved. The work will be an expensive one, and occupy at least three years, owing to the difficulty of procuring labour to the extent required. The rate of wages has been raised, but the progress during the year has not exceeded the formation of about six and a half miles. The work has been commenced at the two ends, Kurseong and the Saddle. Nothing has yet been done in the formation of the road from Kurseong to the plains.

In the Tirhoot district, the road from Mozufferpore to Hajeepore, 34 miles, and from Mozufferpore to the Ganges, opposite Barh, *viâ* Dulsing Serai, 50 miles, have been taken up as Imperial roads. Little was done during the past year beyond surveys and estimates, but work will progress next season.

A road from Chuttra to Chumparun, on the Grand Trunk Road, 32 miles, has been opened out during the year, in connexion with the best cotton field in the Chota Nagpore district. Nine miles of earthwork and ten small bridges have been completed.

A road to Sooree has been commenced, from a point on the Grand Trunk Road opposite the Raneegunge road, which will be carried past the terminus of the Singarun branch railway. Preparations have been made for constructing a light iron bridge over the Singarun river, about three miles from the Grand Trunk Road, which will place the Collieries on the further side of the Singarun in communication with the branch railway, which is to be opened on the 1st September.

The Cuttack and Taldangah Road, 43 *miles.*—Opened last year as a track; has been converted into a good fair-weather road, and the work is nine-tenths completed. The traffic is very great, and it is rapidly increasing. This road connects Cuttack with the navigable portion of the Mahanuddy river, and with the new port at False Point, which is increasing in importance.

"Cotton roads" i
Cuttack

The Superintending Engineer, Cuttack Circle, complying with the orders of Government, submitted a proposal for the construction of roads to facilitate the transit of cotton from the country west of Sumbulpore, Raipore, and Chutteesghur, to the sea-board of Orissa. His proposal embraced the construction of 270 miles of new road, and the improvement of about 96 miles of existing fair-weather roads. The route passes from Cuttack, *viâ* Bankee and Sonepoor, to Binka and Sumbulpoor, with a branch to Sohila, on the Nagpore road. Great difficulties were encountered; but the result of the season's work has been most satisfactory. No less than 220 miles of fair-weather roads have been opened out. The road for the whole length is expected to be completed next season; but with the transfer of Sumbulpoor to the Central Provinces, the roads north of Sonepoor, to which the Lieutenant Governor attached much importance, have been handed over to the Public Works Department of Nagpore.

Bridges.
Tolly's Nullah,
Alipore.

A contract has been made with the firm of Messrs. Brassey, Wythes & Co., for erecting an iron girder bridge over Tolly's Nullah, to lead from Alipore to Calcutta, by the road between the Sudder Court-house and the General Hospital, at the site of the timber bridge, dismantled in 1858. The iron bridge is to be completed before the rains of 1863.

Booryah Bridge,
Grand Trunk Road

The whole of the foundations are now completed. The abutments and 16 piers have been constructed up to springing line, and the cutstone springers have been fixed.

Morhur Bridge, Grand Trunk Road.

The foundations of this bridge also, with the exception of one pier, are completed. The superstructure is also up to springing line, with the springers fixed. The executive engineer has been successful in the manufacture of bricks of a very superior quality for the arching of these two bridges, and although the quantity burnt is not large, the arrangements for the manufacture have been fairly established. It is expected that the 14 openings of the Morhur bridge will be arched over by the rains of 1863, and that the 16 arches of the Booryah will be completed by the rains of 1864.

Leelajun Bridge, Grand Trunk Road.

A project has been sanctioned during the year for restoring the Leelajun bridge on the Grand Trunk Road. This bridge, which was on stone masonry, failed in 1855. The abutments, with one arch on each side, are standing, as also the four central masonry arches. It is proposed to connect them on each side by five iron lattice girders, supported on iron tubular piers resting on the old foundations, which are to be protected by a continuous masonry flooring with curtain walls.

Burrakur Bridge, Grand Trunk Road.

Alterations have been made in the design of this bridge by reducing the number of masonry arches on the east side from five to two, and by reducing the height of the road level three feet, which is the reduced depth of the girders sent out from England. The progress in sinking the foundation blocks has been slow. The blocks of one foundation have reached a depth of 40 feet; it is intended to sink the remaining blocks to a depth of 30 feet below datum, and to protect the whole length by a continuous flooring. The piers for the masonry arches are built up to springing line, and two other piers are ready to receive the girders. All the remaining foundation piers are in progress, and have been sunk from 12 to 24 feet. The centres for the two arches on the east bank are ready, and the arches will be turned during the rains of 1862.

Soane Causeway, Grand Trunk Road.

Of this causeway 1,936 running feet have been completed during the past year, making a total of 8,860 running feet out of 11,450 feet estimated. The remaining 2,590 feet can, it is reported, be completed by the rains of 1863. A good working project has still to be devised for the passage of the ordinary channel of the river from the end of the causeway to the western bank: this distance is about 1,200 feet, the greater part of which is dry during the summer months.

Navigable Canals.
Calcutta Canals.

The Calcutta canals have been maintained in good order throughout the year. A double stop-gate has been commenced on the new canal, just above the junction, to enable the engineers to regulate the flow of the water; shutting it off from the new canal when it is requisite to scour the bed of the old channel.

A range of store godowns has been built on the bank of the canal as an experimental measure, and promises to answer financially, and to supply a growing want. The only godown finished was at once let at a fair rent.

Tolly's Nullah.

The deepening of this tidal channel was deferred during the great pressure for labour caused by the Calcutta drainage works and the railway works at Sealdah. The improvement of the channel will be effected during the next and following seasons. The cut-off of the Boaskhally, the first of three cuts-off, which it is proposed to make on the Eastern Canals, to shortern the distance and improve the navigation, is in progress.

The collections on the circular canals and on Tolly's Nullah, exclusive of fisheries, fines, forfeitures, &c., amount to 3,92,123 rupees, showing an aggregate increase of 26,762 rupees over the collections of 1860–61, and a progressive increase since 1854–55.

Gross collections of toll for the last eight years:

Years.	*Rs.*	Years.	*Rs.*
1854–55 - - -	2,13,240	1858–59 - - -	2,97,853
1855–56 - - -	2,65,262	1859–60 - - -	2,82,868
1856–57 - - -	2,52,005	1860–61 - - -	3,65,361
1857–58 - - -	2,76,353	1861–62 - - -	3,92,123

The number of boats that entered these canals was 234,824, compared with 220,067 boats in 1860-61.

Nuddea Rivers.

The Matabhangah was the only river which could be kept open, and the water fell to one foot. The cuts-off made in the previous year have not enlarged to the extent anticipated, but they shortened the route between the Hooghly and Ganges by 24 hours. These cuts have been deepened and cleared out during the past working season.

The gross collections on the three rivers during the year have amounted to 2,93,226 rupees.

Year.	No. of Boats.	Maundage.	Amount of Collections.
		Rs.	*Rs.*
1858–59 - - - -	75,346	3,78,95,825	1,96,329
1859–60 - - - -	72,234	2,87,68,885	1,83,856
1860–61 - - - -	67,177	3,13,80,630	1,80,682
1861-62 - - - -	72,625	3,23,44,375	2,93,226

This channel, 7½ miles long, will be opened by October next.

Oolabariah Canal.

Accommodation for travellers.

Staging bungalows have been completed at Carragolah, Maldah, and at Cuttack, and others are under construction at Dantoon, at Balasore, at Pooree, at Dingra Ghat, at Kissengunge, and at Neemanadawah on the Patna road. A temporary staging bungalow is being erected at Nulhatty.

EXPENDITURE.

The budget allotment for the year was 51 lakhs, to which 1½ lakhs were subsequently added to be expended on special works for facilitating the transit of cotton and exports generally.

The Central Office of Account states the expenditure to have amounted to 42,47,819 rupees from imperial funds, and 4,91,036 rupees from local funds, as detailed in the margin, to which may be added, on assumption, nine lakhs of rupees for expenditure not accounted for in detail.*

Imperial Works -	*Rs.* 31,48,895
Local Works - -	- 3,42,173
Establishments -	- 12,47,787
Total Expenditure	*Rs.* 47,38,855

*Unclassified expenditure by public works officers -	6 lakhs.
Expenditure by civil officers	3 „
Total -	9 lakhs.

Of the charges for Establishments, 92,283 rupees have no bearing on the supervision of works; the balance, 11,55,504 rupees, exceeds slightly one-fifth of the expenditure (of 53,38,855 rupees) by public works officers, as noted below:—

Total Collections - -	*Rs.* 72,384
Behar Irrigation - -	19,899
Total -	*Rs.* 92,283

Establishments.

Chief Engineer - - - - -	*Rs.* 58,281	or	1·09 per cent.
Accounts, Central Office - -	1,10,688	„	2·07 „
Superintending Engineers - -	1,39,806	„	2·61 „
Executive - - - - -	6,57,108	„	12·30 „
Travelling charges - - -	1,21,134	„	2·26 „
Contingencies - - - -	68,467	„	1·28 „
Total - -	*Rs.* 11,55,504	or	21·61 per cent.

About 12 lakhs of rupees more have been expended from local funds by civil officers, of which four lakhs have been applied to the construction of railway feeders, and eight lakhs to the maintenance of local roads, making the total expenditure on public works of all classes about 68⅓ lakhs of rupees during the year.

This total expenditure bears the following proportion to the population, revenue, and extent of territory in Bengal:—

Population of Bengal	-	40 Millions.
Revenue	„	141½ „ of *Rs.*
Area	„	2,53,000 Square Miles.

Rs. 170	per 1,000 of population.
48	„ 1,000 of revenue.
2,700	„ 1,000 square miles of territory.

The outlay on public works, as classified by the Central Office of Account, has been expended in the following sums:—

Military works - - - - - - -	*Rs.* 5,70,534
Civil works of state - - - - - -	7,76,449
Public improvements (chiefly communications) -	21,44,085

or in the proportion nearly of 16,22, and 66 per cent.

Comparing the classified expenditure with that of the year 1860-61, the following is the abstract result. More detailed statements of the expenditure in each division will be found in Appendix L.

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STATEMENT of Classified Expenditure during the Years 1860–61 and 1861–62 by Officers of the Public Works Department:—

Class.	1860–61.			1861–62.		
	New Works.	Repairs.	Total.	New Works.	Repairs.	Total.
IMPERIAL.						
Army - - -	5,92,606	2,47,981	8,40,587	1,97,481	2,91,106	4,88,587
Naval - - -	437	- -	437	62,797	19,150	81,947
Total, Military -	5,93,043	2,47,981	8,41,024	2,60,278	3,10,256	5,70,534
Judicial - - -	1,35,576	1,22,534	2,58,110	1,77,824	1,12,331	2,90,155
Revenue - -	2,37,290	1,01,727	3,39,017	93,500	88,753	1,82,253
Ecclesiastical - -	31,870	6,658	38,528	24,068	8,275	32,343
Educational - -	8,991	10,391	19,382	2,344	23,075	25,419
General - -	2,64,892	1,21,115	3,86,007	1,57,401	59,840	2,17,241
Total, State - -	6,78,619	3,62,425	10,41,044	4,55,137	2,92,274	7,47,411
Municipal - -	24,114	256	24,470	- -	989	989
Marine - - -	15,564	22,749	38,313	- -	6,120	6,120
Agricultural - -	49,019	1,97,302	2,46,321	60,648	2,24,027	2,84,675
Communications -	5,42,509	4,64,101	10,06,650	9,35,171	5,91,597	15,26,768
Electric Telegraph -	7,705	1,024	8,729	11,409	989	12,398
Total, Public Improvements - -	6,39,051	6,85,432	13,24,483	10,07,228	8,23,722	18,30,950
Total, Imperial -	19,10,713	12,95,838	32,06,551	17,22,643	14,26,252	31,48,895
LOCAL.						
Revenue - - -	- -	- -	- -	23,837	- -	23,837
Judicial - - -	- -	- -	- -	3,631	- -	3,631
Ecclesiastical - -	- -	- -	- -	1,055	- -	1,055
General - - -	- -	- -	- -	515	- -	515
Total, Local State	- -	- -	- -	29,038	- -	29,038
Agricultural - -	- -	- -	- -	20,097	17,058	37,151
Communications -	1,83,373	1,61,287	3,44,660	1,30,182	1,45,802	2,75,984
Total, Local Public Improvements -	1,83,373	1,61,287	3,44,660	1,50,275	1,62,860	3,13,135
Total, Local - -	1,83,373	1,61,287	3,44,660	1,79,313	1,62,860	3,42,173
Grand Total on Works - -	20,94,086	14,57,125	35,51,211	19,01,956	15,89,112	34,91,068
Establishments -	- -	- -	10,57,941	- -	- -	12,47,787

LOCAL.

RECEIPTS AND DISBURSEMENTS.

The following is a Statement of the Sums brought to the credit of the "Amalgamated District Roads Fund" during 1860-61, and available for distribution in 1861-62 :—

Local Fund.		General Fund.	
Sources of Income.	Amount.	Sources of Income.	Amount.
	Rs.		*Rs.*
Net Ferry collections - - -	3,79,281	Toll Collections - -	54,385
Shahabad Cess Fund - - -	12,494	Balance in hand of Magistrates - - - -	2,27,862
Maldah Bazar Fund - - -	184	Undistributed Balances -	48,432
Tolls on District Roads - -	31,324		3,30,679
Convict Labour Funds - -	1,25,802		
Cattle Trespass Fund - -	60,049		
River Fisheries - - - -	25,128		
Previous year's Balances - -	2,47,454		
	8,81,716		
Deduct surplus of twenty-nine Districts which did not require the whole of their Funds - 1,95,922			
Add, contributions in aid of eleven Districts - 61,40	1,34,517		
		As per contra - - -	1,34,517
Total amount available for expenditure on District and Station works	7,47,199	Total amount of General Fund available - -	4,65,196

Total of Local Fund reduced - - - - - -	7,47,199
Total of General Fund increased - - - - - -	4,65,196
Total of "Amalgamated District Roads Fund" - - -	12,12,395

The following Allotments were made in November 1861 :—

Names of Divisions.	From "Local Fund" for District and Station Works.	From "General Fund" for Railway Feeders.	Total.
Arracan - - - - - -	30,744	- - - -	30,744
Assam - - - - - -	37,465	- - - -	37,465
Bhaugulpore - - - - -	44,743	40,000	84,743
Burdwan - - - - - -	1,08,445	1,03,509	2,11,954
Calcutta - - - - - -	18,600	- - - -	18,600
Chittagong - - - - -	19,017	- - - -	19,017
Chota Nagpore - - - - -	34,534	- - - -	34,534
Cuttack - - - - - -	27,365	- - - -	27,365
Dacca - - - - - -	42,090	- - - -	42,090
Nuddea - - - - - -	1,10,627	2,00,000	3,10,627
Patna - - - - - - -	1,98,323	30,000	2,28,323
Rajshahye - - - - - -	75,246	30,000	1,05,246
Mutlah Feeders - - - - -	- - - -	50,000	50,000
Total - - -	7,47,199	4,53,509	12,00,708

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The Progress made on Railway Feeders during 1861–62, is shown in the following Table:—

Nos.	Names of Feeders.	Length in Miles.	Progress and Present State.
	East Indian Railway Feeders.		
	Patna Division.		
	Shahabad District :		
1	Bickram to Doomraon Station	27	The construction of this road was commenced with the cold weather of 1861, and it is expected that the entire works will be completed and open to traffic by August 1862.
2	Nassygunge to Bickram	13	This road is a continuation of the preceding. The earth-work, for a length of nine miles, has been thrown up, and the remaining four miles will be completed shortly.
3	Gudhegay to Arrah	12	This road is in about the same state of progress as the preceding, and its completion is expected by the end of August 1862.
4	Sasseram and Peeroo	37	It is expected that the remaining bridges to be constructed on this line will be soon completed.
5	Ganges Fair-weather Railway Feeders.	–	These are short lines leading from the granaries and ghats of Padmuniah, Hetumpore, and Salempore to the Beheea railway station. They have been made passable for Hackeries, and it is expected that these roads will be completed very shortly.
6	Dogurrah to Beheea	2	This metalled feeder connects the main or Buxar roads with the Beheea railway station. It will be completed by the end of July 1862.
	Sarun District:		
7	Nubbeegunge to Chuprah	–	These important District roads are to be completed at once. Funds have been allotted for this purpose from the one per cent. Income Tax proceeds.
	Behar District:		
8	Nowadah to Behar	–	
9	Behar to Barh	–	
	Burdwan Division.		
1	Soonamookhy to Paneeghur Railway Station	11½	The construction of this road was commenced only in March last, and it is satisfactorily progressing.
2	Adjai to Pogla River	58	Three-fourths of the earth-work have been completed, and the remainder will be finished at an early date. Measures are now being taken for acquiring the lands for this road.
3	Soopore to Bhulpore Railway Station.	2	
4	Nittyanundpore to Gooskerah Station	14	Under construction, and will be completed as a fair-weather road in the current year.

Progress made on Railway Feeders during 1861–62, &c.—*continued.*

Nos.	Names of Feeders.	Length in Miles.	Progress and Present State.
	Burdwan Division—*continued.*		
5	Cutwa to Burdwan - - -	33	Earth-work to the extent of more than one-half has been completed; the remaining-half is progressing.
6	Satgatchea to Mymaree - -	7	A metalled feeder has been completed from Satgatchea to the town of Mymaree, and the present work is intended to carry the road, a distance of about a mile, through the town to the railway station.
7	Culna to Pundooah - - -	17	The earth-work and masonry have been commenced.
8	Grand Trunk Road to Mugrah Station.	1	Progress is being made in the metalling of this road, which is an important feeder.
	BHAUGULPORE DIVISION.		
	Bhugulpore District:		
1	Mudepoorah to Bhaugulpore -	—	The works on this road are necessarily heavy on account of its passing through the valley of Gogra, which extends for a length of about sixteen miles on the line of road. This valley is subject to the inundations of the Ganges and Kossey as well as of the Gogra river. The section of this road from Kissengunge to Mudehpoorah has not been surveyed, nor has the estimated cost of its construction been yet ascertained.
	Sections I. and II.		
	Starting point at Kaze Koryah to Phoolout.	13	
	Section III.		
	Phoolout to Moulee Kishengunge -	12¼	
	Section IV.		
	Kishengunge to Mudepoorah -	35	
	Monghyr District:		
2	Burriarpore to Khurukpore - -	13	It is expected that this road, which is being constructed by the Railway Engineer, will very soon be fit for traffic.
3	Chukye to Lukhee Serai - -	48	A portion of this road has been constructed, but the works are now stopped and no more money will be expended on it, until it shall have been ascertained what it will cost to complete it.
	RAJSHAHYE DIVISION.		
1	Jungypore to the Moradoi Railway Station.	15	These roads are under construction and will be completed soon after the close of the rainy season of 1862.
2	Sooty to Pakour Railway Station -	13	

EASTERN BENGAL RAILWAY FEEDERS.

Nos.	Names of Feeders.	Length in Miles.	Progress and Present State.
	NUDDEA DIVISION.		
1	Kishnaghur to Bagoolah - -	11	Earth-work and turfing nearly completed; bridges and metalling in progress. It is expected that the metalling will be completed for half the depth before the opening of the railway, so as to be available for traffic. The entire work will be finished by the close of the year.

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Progress made on Railway Feeders during 1861-62, &c.—*continued.*

Nos.	Names of Feeders.	Length in Miles.	Progress and Present State.
	Nuddea Division—*continued.*		
2	Santipore to Ranaghat - - -	10	The earthwork and turfing on this road will be completed by the end of the rains. It is expected that the entire work will be finished early in 1863.
3	Kotechandpore to Kissengunge -	20	The completion of this road cannot be expected before the end of next season. The delay in the progress of this work is attributed to the very heavy falls of rain during the brick-burning season, and the consequent destruction of materials under preparation.
4	Bongong to Chagdah - - -	20	The progress on this work is most satisfactory, and the road will be available for traffic by the opening of the railway.
5	Kopenessur to Bejpore - - -	8	The works on these roads will be put in hand at the close of the rains of 1862.
6	Ghoseparrah to Kanchraparrah Khal.	4	
7	Sooksagur to Chagdah Station -	5	
8	Kanchraparrah to Barrackpore -	16	This road, it is expected, will be completed by the end of the year, if not by the opening of the railway.
	Rajshahye Division.		
1	Comercolly to the Kooshtea Railway Station.	13	The whole of the earth-work has been completed, and also a portion of the metalling.
2	Kooshtea to Comedpore - -	8	The preliminary work, including survey and marking out of the road, has been completed.

MUTLAH RAILWAY.

Nos.	Names of Feeders.	Length in Miles.	Progress and Present State.
1	Rajahpore to Sonapore - - -	4	The metalling of these roads is being burnt and the earth-work has been commenced. But as these feeders were only surveyed and marked out at the close of the year under review, no progress of a satisfactory nature can be shewn upon them. The works are, however, just commencing to progress well.
2	Comulgatchee to Sonapore - -	$2\frac{1}{2}$	
3	Barriepore to Chappahatty - -	6	
4	Narainpore to Chappahatty - -	$2\frac{1}{2}$	

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The subjoined Statement shows the amounts sanctioned for the Feeders in the Nuddea District, the cost of survey, and compensation for the land.

Statement.

	Feeders.	Estimate sanctioned by Government.	Probable Cost of Survey and Compensation.	Total.	Expenditure in 1859-60 and 1860-61.	Expenditure in 1861-62.	Total Expenditure.	Balance Required.
		Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1	Kishnaghur and Bagoolah - -	1,01,844	3,000	1,04,844	43,325	23,700	67,025	37,819
2	Santipore and Ranaghat - -	71,700	12,000	83,700	18,880	24,430	43,310	40,390
3	Kotechandpore and Kissengunge	1,37,595	20,000	1,57,595	10,538	49,436	59,974	97,621
4	Bongong and Chagdah - -	1,22,169	20,000	1,42,169	10,642	51,960	62,602	79,567
5	Kanchraparrah and Barrackpore	1,03,697	30,000	1,33,697	-	22,144	22,144	1,11,553
	Total - - *Rs.*	5,37,005	85,000	6,22,005	83,385	1,71,670	2,55,055	3,66,950

Local Fund Roads.

The works executed during the year, with the assignments granted from local funds, consist wholly of repairs and maintenance of roads, and of the bridges on district and station roads. Minor works of improvement and the construction of small bridges have in some cases been carried out, but no works of importance deserving separate notice.

The amounts expended by private individuals on works of public improvement in Bengal are as follows:—

Expenditure on Public Works by Private Individuals.

	Rs.
Bhaugulpore - - - - - - - -	1,000
Burdwan - - - - - - - -	64,193
Chittagong - - - - - - - -	10,521
Cuttack - - - - - - - - -	2,350
Dacca - - - - - - - - -	1,475
Mymensing - - - - - - - -	4,935
Nuddea - - - - - - - - -	19,139
Patna - - - - - - - - -	26,044
Rajshahye - - - - - - - -	36,858
Total - - - *Rs.*	1,67,275

CALCUTTA MUNICIPAL.

Drainage.

The portion of Calcutta Drainage Works, which has been sanctioned, and called experimental, has progressed steadily during the year. The Main Sewer (Dhurrumtollah-street) is now completed from the river Hooghly to the temporary pumping station at Entally, with exception of a short length of about 50 feet under the Strand-road, which will not be formed until after the rains of 1862. The temporary pumping station at Entally has been completed as far as the engine and pumping house are concerned; the range of workshops adjoining are nearly up to the roof. High level sewer-works, which are to convey the sewage from the temporary pumping station at Entally to the canal just below the site of the permanent pumping station, have been placed in progress, and the sewer in North Road Entally has been completed. The permanent high level works, which are to lead from the permanent pumping station to the Tingrah Khal, and the open excavation from thence to the central channel of the lake, have not yet been commenced upon, and they must be constructed before the sewage of the portion of city which is to be discharged through the Dhurrumtollah Main Sewer, can be led into it; the experiment with the temporary pumping station being, for the present, confined to pumping out the water only, and just so much sewage as used under the old system to discharge directly into the Entally cesspool.

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As noticed in the last Report, the expense of the drainage works has far exceeded the original estimate, owing to the rise in the cost of labour and of materials, and to the modifications in the project which have been decided upon by the Drainage Committee and by Government from time to time.

The cost of the sewers up to date has been as follows:—

	Rs.
Dhurrumtollah - - - - - - - - -	3,46,860
Chowringhee Road - - - - - - - -	69,622
Old Court House-street - - - - - - -	32,830
	4,49,282
Engineer and Office Establishment - - - -	43,338
Total - - *Rs.*	4,29,620

Based on these calculations, the total cost of the entire drainage works of the town would be as follows:—

	Rs.
Out-fall Works - - - - - - -	7,53,977
Main Sewers - - - - - - - -	24,96,138
Second Class Sewers - - - - - -	16,17,225
Third Class Sewers - - - - - - -	26,65,302
Total - *Rs.*	75,32,712
Engineering and Contingencies - - - - -	7,53,271
Grand Total - - *Rs.*	82,85,983

The question of completing the works for the whole city has, therefore, to be reconsidered with reference to the great cost involved.

Water Supply.

An ample supply to the city of Calcutta of wholesome drinking water, is a necessity which every year makes more apparent; and this is felt to be the first and most pressing want of the city. The Government have accordingly allotted three lacs of rupees from each of the two instalments received from the proceeds of the one per cent. income tax, and the sum of six lacs of rupees has accordingly been invested for the town of Calcutta, to which the Municipal Commissioners are able to add about two lacs of rupees derived from the sum set apart for water. A modified scheme is now under preparation by the Engineer of the Municipal Commissioners for establishing Waterworks, which shall provide for an ample water supply to the native quarter of the town, and for bringing water into the European quarter as far as Wellington-square,

SECTION VII.—RAILWAY.

EAST INDIAN RAILWAY.

Open line.

On the 1st May 1861, the East Indian Railway was open through from Howrah to Rajmehal, 202 miles; with the branch railway to Raneegunge, 46 miles.

Three and a half miles of the Singarun Branch Line was opened for coal traffic in August, and successive openings were made on the Main Line in November 1861; in February, and in April 1862, from the Teenpahar station to Bhaugulpore, Jumalpore, and onwards to Monghyr; making the length of main line open, at the end of the official year, 297 miles, with 49½ miles of colliery branches, and 13 miles of branches to the Ganges at Rajmehal and at Monghyr, in all 359½ miles of open railway.

Earnings.

The total amount earned by the East Indian Railway during the year 1861 has amounted to - - - - - - - - - - *Rs.* 38,78,667

The total expenses - - - - - - -	„	19,54,648
Making the profits - - - - -	*Rs.*	19,24,026

The number of passengers carried has been—

First Class	18,801
Second Class	71,589
Third Class	17,04,498
Total	17,94,888

The ordinary merchandize carried has amounted to *Mds.* 39,33,812
Gross Receipts - - - - - *Rs.* 10,49,109

The minerals carried has amounted to - - *Mds.* 57,80,192
Gross Receipts - - - - - *Rs.* 9,97,721

Accidents.

The number of persons killed during the year from accidental causes attending the working of the railway has been 21, of whom three were passengers, and 18 were persons connected with the line. The number of persons injured has been 56, of whom 52 were *employés*, and the others passengers.

Train signalling.

The train signalling system was brought into operation during the year under review on the busiest part of the experimental line, viz. between Howrah and Pandooah, and also on the section from Teenpahar to Bhaugulpore, where, owing to the numerous curves in cuttings, the running of the trains had been attended with some danger. By this arrangement all possible risk of trains meeting has been guarded against.

Revision of goods tariff.

Grains.

The question of revising the goods tariff came under consideration this year, and the following are the principal changes made in the classification of goods:—Bricks, sand, and rough stones transferred from the first to the special class, which hitherto contained only coal; ballast, kunkur, and soorkey have been added to the tariff sheet, and placed in the special class. Seeds, pulses, and edible grains, transferred from the second to the first class, also sugar and saltpetre, chalk and betel leaves. Broken glass was added to the tariff, and placed in the first class. Opium and indigo were removed from the third to the fourth class. Many small modifications were introduced in the distribution of articles of trade. The rates per maund for special goods were also reduced as per margin, and the system was extended to the station of Mugra, which had not before shared in this advantage. Between all other stations the charge is the same as the ordinary first class charge, viz. one-third of a pie per maund per mile. The terminal charge of one pice per maund on all consignments, exceeding 32 maunds, was also abolished. All these changes are expressly temporary and experimental for one year, subject to revision at the end of that term.

Raneegunge to Burdwan from 2 anna to 1 anna 10 pie.
Raneegunge to Mymarree from 2 annas 3 pie to 2 annas 2 pie.
Raneegunge to Chandernagore from 2 annas 7 pie to 2 annas 6 pie.
Raneegunge to Serampore from 2 annas 8 pie to 2 annas 7 pie.
Raneegunge to Howrah from 2 annas 10 pie to 2 annas 8 pie.

Main line.

It is expected that the whole length of railway through the Bengal division, 483 miles, will be opened in November next; the opening to Patna being made in the month preceding.

Training of engine drivers.

The important work of training engine drivers in India has been very successfully accomplished by the Locomotive Department of the East Indian Railway. It is now established that the resources of this country may be confidently relied on for the permanent supply of drivers of locomotive engines, and that it is only necessary to import trained drivers from England for the first two or three years of the working of a new railway.

Mr. Stokes, the Superintendent of the Locomotive Department, in the course of six years has engaged 261 firemen in this country, of whom 65 have become engine drivers, and 74 others are in course of training for the same duty on the running shed. The Government proposed, in appreciation of Mr. Stokes' zealous labours, and to mark the importance of the results, that a bonus of 10,000 rupees, should be awarded to the locomotive department, three-fifths of this amount being assigned to the Superintendent; and that a premium of 250 rupees, should be given in future to the Locomotive Department for every approved engine driver trained at Howrah, three-fifths of which bonus should also go to the Superintendent. It was further suggested that in the event of a Railway Company engaging drivers trained by any other Railway Company, that a payment of 30 *l.* should be made, the extra 5 *l.* being an additional perquisite of the Locomotive Superintendent who trained the man.

Howrah terminus.

The subject of the "Howrah Station arrangements" has been finally disposed of. The following proposals have been approved by Government:—

Transfer of locomotive shops to Lilloah, about two and a quarter miles above Howrah.

Removal of coal staiths to Ghoosrie. Substitution of floating landing stages for the wooden jetties at Howrah and Armenian Ghats. Construction of an extensive one-storied

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goods warehouse, with a paved slope in front, and other necessary adjuncts. Erection of a flat-topped girder over-bridge at the Chandmaree level crossing.

These measures, when carried out, will enable the traffic department to manage its business with efficiency, and in an unencumbered yard.

Colliery branches.

The Singarun Colliery Branch will be opened in September next. The Burrakur Colliery Branch will not be ready till the end of 1863, but the first length of three and a half miles to Searsole will be opened in January.

EASTERN BENGAL RAILWAY.

State of works.

The works on this line of railway have progressed well, but neither was the line completed for opening by the end of the year, nor were the preparations of rolling stock sufficient to admit of the railway being opened for traffic by the 1st May 1862, as anticipated in the Report of last year. It was further considered an advantage that the embankments should become thoroughly consolidated before the line is worked, and the opening is accordingly deferred till after the rainy season.

CALCUTTA AND SOUTH-EASTERN RAILWAY.

Open line.

The first section of this railway, extending from Calcutta to Chappahatty, a distance of 15 miles, was opened for public traffic on the 2d of January 1862.

Fares.
1st Class, 1 anna.
2nd Class, ½ anna.
3rd Class, ¼ anna.

The experimental scale of fares charged, is stated in the margin, with monthly tickets at a small reduction, for the benefit of daily third-class passengers. The goods tariff is the same as that on the East Indian Railway, with the special class merged into the first class; this tariff has been sanctioned as temporary and experimental for one year, subject to revision at the end of that term.

Passenger traffic.

The following abstract shews the statistics of the passenger traffic, for the four months ending April 1862:—

First Class.

Calcutta	33	72	247
43	Jadupore	2	20
58	4	Sonapore	34
262	7	20	Chappahatty.

Second Class.

Calcutta	161	380	811
206	Jadupore	21	21
370	29	Sonapore	48
801	24	46	Chappahatty.

Third Class.

Calcutta	5,362	12,572	3,473
5,773	Jadupore	2,697	1,600
12,543	3,298	Sonapore	846
3,746	1,563	728	Chappahatty.

Additional station.

An experimental station has been sanctioned at Gurreah-Hât, on the north bank of Tolly's Canal, midway between Jadupore and Sonapore.

Line under consideration.

At the end of the year 1861-62, the progress of works beyond the Chappahatty Station, warranted an anticipation of the line being opened to the Mutlah, by the end of the rainy season. But a disastrous accident which occurred at the Pialee Bridge on 28th June, the completion of which work governs the opening of the railway, has retarded operation at this river. The 1st of January 1863 may now be regarded as the earliest probable date for opening through to the Mutlah.

Reorganization of the Railway Department.

The changes of the members of the Consulting Engineer's Staff proving a serious drawback to the efficiency of the Department, it was determined to appoint an uncovenanted officer as assistant to the consulting engineer to be also an ex-officio assistant-secretary to the Local Government. This change has been carried out and in force since the 1st July 1861, and the consulting engineer, in addition to the permanent assistant, has now only one deputy attached to his office.

SECTION VIII.—MARINE.

The actual strength of the Pilot Service at the close of the year is noted below.

Branch Pilots	12
Masters	35
Mates	28
Senior Second Mates	10
Acting Junior Second Mates	2
Volunteers	36
On active service	123
On leave	20
Suspended	1
	144

The number of Pilots on the Free List was 59, and the number of Licensed Pilots 17.

Prohibition regarding the receipt of gratuities, and enhancement of the existing pilotage dues.

It was stated in last year's Report that the question of the rate of remuneration to be granted to Pilots was then under consideration. By orders subsequently issued the receipt of a gratuity by a Pilot was prohibited on pain of dismissal, and at the same time 25 per cent. was added to the existing pilotage dues, and the Pilots on the Free List, who had exchanged their salaries for earnings, were allowed 60 per cent. upon the aggregate amount of Pilotage levied, while Licensed Pilots were allowed 50 per cent. of the Pilotage earned.

Thirty-six salaried officers have joined the Free List since the promulgation of the above orders.

Addition to the number of pilots.

The Chamber of Commerce having made a representation to Government on the subject of the insufficiency of the number of Pilots for the requirements of the port, an addition of 10 running officers was made by the promotion of junior officers to the grade of Acting Mate Pilots, and a corresponding number of Acting Mates were allowed to pass as full Mates.

Command of pilot vessels entrusted to officers other than Pilots.

Another change was also introduced in the Department by the issue of orders for the appointment of officers other than Pilots to the command of pilot vessels. As yet this arrangement has been carried out only in one instance, but it will be adopted generally as vacancies occur, and the officers relieved will become available to the Running List.

Number of vessels which arrived at and left the port.

The number of vessels which arrived at and left the port during the year was 1,793 with a tonnage of 13,37,632 tons, being an increase of 1,42,267 tons over the previous year. The number of vessels which grounded was 14, and the number of collisions also 14.

Trial of Pilots.

Twelve Pilots were tried during the year for various offences, four of the trials being for drunkenness on duty. Of these three were found guilty and dismissed.

River survey.

The River Surveyor reported at the close of the year that the channels from the sea to Saugor were in a very satisfactory condition, and that from Saugor to Diamond Harbour a steamer with sufficient power, of a draught not exceeding 24 feet, would find little difficulty in coming up on any day of the year, while one drawing 26 or 27 feet could be brought up there under favourable circumstances of tide and weather. Several vessels of a draught above 23 feet have proceeded down lately, taking the top of high water to cross the several bars. The Auckland and Lloyd's Channels have continued to deteriorate. The latter channel when surveyed in November last had only 8 feet 6 inches at low water.

Pilot Brigs, Light Vessels, Light Houses, &c.

The number of pilot brigs in commission is reduced to four, all iron vessels, and in serviceable condition; the *Fame*, however, is commencing to show signs of decay. The light vessels are five* in number, and are all in good order, with the exception of the *Hope*, which will be replaced after the present Monsoon. The Lower Gasper Light, which used to be withdrawn during the N. E. Monsoon, has now been made a permanent light. The light-houses at False Point, Saugor, and Cowcolly have also been well maintained.

**Deva*	Ridge Light.
Comet	Eastern Channel.
Saugor	Mutlah.
Star	Lower Gasper.
Hope	Upper Gasper.

Houses of Refuge.

The houses of refuge on the sea-face of the Soonderbuns are six in number, and were visited during the year, repaired, and the provisions and water replenished.

Moorings in the port

The moorings in the port are 182 in number, fixed and swinging, and extend from

Mint Ghat to the end of Garden Reach. They were all carefully overhauled and found in good order.

Wreck and anchor boats.

The wreck and anchor boats have been as usual employed in recovering anchors and wrecked property from the bed of the river. The receipts on this account amount to 27,123 rupees; but much work has been done in the way of removing obstructions, for which no payment was received, and this must be taken into account in calculating the profits of this branch of the service.

Shipping office.

The operations of the Shipping Office show that the number of seamen of all nations shipped through the office during the year was 14,063, and the number of men discharged 15,121. The number of ships that resorted to the office was 612. The actual income of the office was *Rs.* 24,065. 8., and the expenditure *Rs.* 20,665. 15. 3., leaving a balance in favour of the office of *Rs.* 3,399. 8. 9.

Arrangements made in the new port of Mutlah.

In anticipation of the completion of the railway to the Mutlah, and the resort of vessels to the new port at that place, the work of relaying and overhauling the buoys was commenced upon and prosecuted with vigour during the year. The buoyage has been nearly completed, and the navigation of the river is already safe and practicable. The necessary arrangements for pilotage have also been made.

The rates of pilotage in the Mutlah have been fixed at half those levied in the Hooghly. One-half of the fees will be allowed the pilots as remuneration; the other half will be credited to Government to meet the expenses of the pilotage.

SECTION IX.—MISCELLANEOUS.

EMIGRATION.

Number of emigrants despatched.

The result of the past year's operations exhibits a great increase in the number of Emigrants, 60 ships have sailed from Calcutta during the year, carrying an aggregate of 22,600 persons to eight different Colonies. The number of Emigrants in the preceding year was only 14,533.

Name of Colony.	No. of Ships.	No. of Emigrants.
Mauritius - - -	20	6,936
Jamaica - - - -	6	2,161
Trinidad - - -	5	2,030
British Guiana - -	11	4,366
Grenada - - -	3	1,134
St. Lucia - - -	1	330
St. Vincent - - -	1	310
Re-union - - -	13	5,333
	60	22,600

Departure and Return of Emigrants for five years.

The following Table exhibits the departure and return of Emigrants for the last five years:—

Years.	Departures.	Returns.
1857-58 - -	13,539	4,429
1858-59 -	26,672	5,626
1859-60 - -	23,312	3,226
1860-61 - -	14,533	1,778
1861-62 - -	22,600	1,710

Mortality rates.

The rate of mortality in the case of the Emigrants sent to Mauritius during the year was only 1·6 per cent.; in the case of the West India Emigrants, so far as information had been received, 3·88 per cent.; and in the case of the Emigrants embarked for Re-union 5·13 per cent.; the result in every case showing a decreased mortality as compared with the previous year.

At

Changes in the system of Recruitment.

At the suggestion of Mr. Beyts, who was specially deputed by the Mauritius Government to inquire into certain details connected with Emigration from this country, some modifications have been made in the system now in force for recruiting Emigrants, with a view to check malpractices arising from the competition of the agencies of the different Colonies. The adoption of these changes has been determined upon with the consent of the agents, pending the introduction of a legislative enactment providing a sufficient remedy for the evils complained of.

Appointment of a Medical Inspector of Emigrants.

A Medical Inspector of Emigrants was appointed during the year with a view to assist the Protector of Emigrants in carrying out more effectually the objects for which a Government Protectorate was established. The chief duties of the Medical Inspector will be to exercise a careful supervision over the sanitary arrangements of all the Depôts, and to see that the treatment, clothing, and diet of the Coolies are such as are likely to fit them for a sea voyage. He will be jointly responsible with the Protector for the suitableness of vessels selected for Emigration purposes. He will direct special attention to the ventilation, provisioning, and watering of the ships. He will superintend the embarkation, prevent over-crowding, and inspect the arrangements for the Hospital. He will impress upon the Medical Officer of each ship the necessity of keeping up a detailed Medical Diary, and these Diaries will eventually come under the Medical Inspector's scrutiny.

Emigration of Coolies to Assam and Cachar.

The system under which the Tea Plantations of Assam and Cachar are supplied with labourers from Bengal has attracted the serious attention of Government during the year. It was reported that in almost every shipment of labourers from Calcutta a fearful amount of mortality occurred from cholera and other diseases during the journey. In one case the mortality was said to have reached even to 50 per cent. From inquiries which were made, there seemed to be too much reason to believe that this fearful mortality was attributable chiefly to great want of foresight and care in the despatch of labourers, especially in the river steamers. A Committee of gentlemen of much experience in the working of the Emigration Department was accordingly appointed to report upon the arrangements in force for importing labour into Assam. The opinion at which they arrived after careful inquiry was, that Coolies were shipped in large batches without any arrangement to secure order and cleanliness; that uncooked food was issued without cooks to prepare it up; that the Medical charge of the Coolies in many cases was left to ignorant Chupprassies, who were entrusted with small supplies of Medicine with the uses of which they were of course as ignorant as the men to whom they administered it: in other cases unqualified Medical Officers were sent in charge; labourers were embarked in some instances almost in a dying state; over-crowded flats were lashed to steamers day and night, and the Coolies on board were thus deprived of their only chance of free ventilation. The Committee found that there was no uniformity of system in the despatch and recruitment of Coolies; labourers, in most cases, were provided by Native Contractors at so much per head; practically the supply of labourers was, they found, an ordinary commercial transaction between a Native Contractor and the Planter, "all parties considering their duty and responsibility discharged when the living are landed and the cost of the dead adjusted." There appeared to be no specific engagement on starting between employer and labourer, —a state of things which opens a road to an immense amount of false statement and exaggeration on the part of the Native Recruiters. They found an entire absence of any efficient Medical inspection of Coolies before shipment, and even when the men were inspected by the Planters' Agents, feeble and sickly persons were, it was believed, substituted for the healthy men accepted and passed,—persons at the point of death having been known to be sent on board. There was no inspection of the boats employed. The depôt of a Native Contractor is thus described by the Committee:—"We found little trace of any habitation, but a square of ground was pointed out to us, in the neighbourhood of Fenwick's Bazaar, as Thakoor Lalla's depôt; and a hut, a few feet square, only now in course of completion, was said to be the sole accommodation. This square resembled rather the half-dried bed of a small tank, greatly defiled by the surrounding people, than anything else that we can compare it with. A spot more repulsive to sight and smell we could not imagine; and having assured ourselves beyond all doubt that the Contractor's labourers did really congregate here, we felt no surprise at the stories which we heard of the numbers that yearly fall victims to disease in his hands. We found no person in this place who would acknowledge any connection with Thakoor Lalla, nor any sort of preparation for the reception of human beings, except the hut abovementioned; and we were forced to conclude that the proprietor, having heard of our intended visit, had removed all that belonged to his depôt from fear of more damaging disclosures." The supply of women is stated to be out of all proportion to the supply of men, the rate being only five to 15 per cent. The smallness of this proportion is considered by the Planters to be the principal cause of the very numerous desertions which take place during the river passage and after arrival.

The existence of such a state of things as is indicated in the Committee's Report was clearly one which demanded the immediate interference of the Government. A legislative measure remedying the evils and providing some system beneficial alike to the labourers and their employers—who after all must eventually be the greatest sufferers by the continuance of the abuses indicated—is under the consideration of Government.

MEDICAL.

Medical College Hospital.

The number of in-patients in the Calcutta Medical College Hospital during the year was 4,423, of whom 1,959 were Christians, and 2,464 natives. The rate of mortality amongst the former was 10·05 per cent., amongst the latter 26·01 per cent., both rates being slightly in excess of those in 1860, which were 9·70 and 22·83 per cent., respectively.

The relative prevalence of the different classes of disease treated in the Hospital is exhibited in the following statement:—

——	Europeans.	Natives.
1. Zymotic Diseases, per cent. -	58·39	54·34
2. Constitutional ditto -	3·16	4·82
3. Local ditto -	26·44	26·54
4. Developmental ditto -	3·82	4·42
5. Violent Deaths or Diseases -	8·16	9·86

In the Surgical Department there were 130 operations, and the per-centage of deaths was only 11·53 to 17·93 of the previous year. The minor operations in the Out-Dispensary were 928 in number.

In the Midwifery Department there were no less than 131 confinements,—much the largest number in any one year since the establishment of the institution.

The number of patients treated in the Male Out-Dispensaries was 18,424 to 12,705 in 1860; and in the Out-Dispensary attached to the female ward were treated 3,507 women and 3,097 children.

The aggregate of in-door and out-patients treated in the Hospital was 29,451.

Ophthalmic Hospital.

The total number of new patients admitted in the Ophthalmic Hospital during the year was 3,611, of whom 3,112 were out-door and 499 in-door patients. A comparison of seven years is exhibited in the following table:—

——	In-door Patients.	Out-door Patients.	Total.
1855-56 - -	425	1,786	2,211
1856-57 - -	496	1,674	2,170
1857-58 - -	506	2,024	2,530
1858-59 - -	519	2,251	2,770
1859-60 - -	528	2,442	2,970
1860-61 - -	482	2,745	3,227
1861-62 - -	499	3,112	3,611

The number of old out-door patients on the books was 25,292, and of these 3,046 were Christians, 17,045 Hindus, 5,008 Mahomedans, and 193 of other denominations. The total number of out-door patients, old and new, was 28,404.

The number of operations performed was 170, exclusive of minor ones; and of these 111 were for cataract, 26 for artificial pupil, and the rest for extraction of the eye-ball.

Lunatic Asylums.

The number of lunatics under treatment in the Bhowanipore Asylum (which is exclusively for European and Eurasian patients) was 118. Of these 10 were cured and discharged or transferred to their friends, 34 sent to England, five died, and 69 were under treatment at the close of the year.

The results in the asylums for native patients are exhibited in the following Tables:—

Name of Asylum.	Number of Patients under Treatment.	Cured and discharged, or transferred to their Friends.	Escaped.	Died.	Under Treatment at the Close of the Year.
Dullunda - -	363	108	—	60	195
Patna - - -	165	41	—	33	91
Moorshedabad -	97	46	3	11	37
Dacca - - -	304	82	—	13	209

The mortality in the Dullunda and Patna asylums was heavy. In the latter, this was owing entirely to exceptional causes, the institution having been first visited by cholera, and then inundated by an overflow of the Ganges, which gave rise to bowel complaints of a peculiarly virulent character.

The voluntary system of employment had been productive of the best results in the asylums at Patna and Moorshedabad. In all the asylums, the profits of lunatic labour have been made available for extra comforts for the lunatics.

The attention of the late Lieutenant-Governor having been drawn to the manner in which persons labouring under unsoundness of mind are often sent in by the local officers to the lunatic asylums, a circular was ordered to be addressed to the magistrates, informing them that no persons supposed to be of unsound mind ought to be sent to a lunatic asylum without due examination, and that it is not sufficient for a magistrate to act upon the mere opinion of a medical officer as to the state of the patient's mind, but that he should also satisfy himself by personal examination, or other proof, that the alleged lunatic is a proper person to be sent to a lunatic asylum.

Charitable Hospita and Dispensaries.

In the Appendix will be found a statement (M 1), exhibiting the number of patients treated in the Charitable Hospitals and Dispensaries throughout the Lower Provinces, and the total and average expenditure incurred on this account; also a comparative statement (M 2) of vaccination from 1856 to 1861.

Epidemic in the villages of Hooghl and Baraset.

It only remains to be noticed that a very dangerous epidemic broke out during the year in some of the villages of the district of Hooghly, and throughout the subdivision of Baraset. The disease was a fever chiefly of the intermittent type, complicated by affections of the spleen or liver, or diarrhœa or dysentery. It was generally attributed to the unusually large quantity of rain which had fallen during the previous season, acting on the very luxurious growth of vegetable matter on all sides. On the serious nature of the epidemic being brought to the notice of Government, steps were at once taken to afford every possible relief. A large supply of medicines was sent to the villages infected, and a sub-assistant surgeon, with a sufficient complement of native doctors and compounders, was deputed to the district. Many lives were saved by these means. Regarding the number of deaths which occurred, no accurate information was obtainable, but the mortality was described to be very great indeed, and whole families were carried off in some places, before medical aid could be procured.

CALCUTTA MUNICIPAL AFFAIRS.

Income and expenditure of the year

The total income derived during the year from every source of the Municipal Department, excluding the lighting rate, was *Rs.* 6,76,026. 1. 11.,* which, with the balance brought forward from last year's account, the proceeds of Government Securities sold, and of various petty receipts, &c., made up a total of *Rs.* 8,00,905. 10. 5. Out of this amount 1,80,000 rupees were set apart for the new Drainage Account, and 30,000 rupees for the Water-Supply Account. The rest, with the exception of a small balance of *Rs.* 3,311. 0. 2, was expended on account of the conservancy improvement of the town.

	Rs.	*a.*	*p*
*House Rate collections	5,73,642	14	
Carriage and Horse Tax	67,385	9	
Cart Tax - - -	12,872	4	
	6,53,900	11	
Other sources - -	22,125	6	1
Rs.	6,76,026	1	1

City improvement

The following were the principal improvements effected during the year:—

1. The new street between Dhurrumtollah and Jaun Bazaar, noticed in last year's Report, was entirely completed.

2. The plot of ground known as Bamun Bustee, lying between Theatre Road and Circular Road, was cleared of huts, the streets widened, and a square completed and opened to the public.

3. The foot-paths along Old Court House-street and the Dhurrumtollah-street were completed.

4. The engine at Chandpaul Ghaut for pumping water from the river was thoroughly repaired, and an extra engine, originally intended for Nimtollah Ghaut, is being put up at the former place in order to increase the water-supply.

5. The reservoir on the esplanade in connection with the Chandpaul Ghaut water-engine was enlarged.

Collections of Lighting Rate, and expenditure for lighting the town.

The amount of lighting rate collected during the past year in Calcutta, was *Rs.* 1,29,681. 5. 4; the total sum expended during the year for lighting the town amounted to *Rs.* 1,11,272. 1. 1. The number of lamps lighted with gas was 941, leaving only 59 to complete the 1,000 sanctioned by Government.

Commission for the revision of municipal arrangements.

A Memorial having been presented by the Trades' Association, complaining of the inefficiency of the municipal arrangements in Calcutta, a mixed commission was appointed by Government to inquire into these allegations. The result was a recommendation that for the present Municipal Commission should be substituted one Central Board, consisting of six members, and the commissioner of police as president, and six Local Boards. The members were all to serve gratuitously. The Local Boards were to have control of merely local works, and the Central Board to have the allotment of the funds of the whole, as also the direction of all works of general utility to the population of the city. The scheme is under the consideration of the Legislature.

REVENUE SURVEY.

Professional.

The work done in the professional branch of the survey embraced an area of 10,262 square miles, of which 4,662 was mouzahwar, and the rest (5,600 square miles) topographical. The estimated expenditure for the entire work is 2,57,885 rupees, which gives an average of 25·2 rupees per square mile.

Non-professional.

The work done in the non-professional branch may be exhibited as under:—

Number of Villages demarcated, having an estimated area of 3,508 square miles	7,201
Number of Thakbust Maps made over to Surveyor	5,810
Number of Boundary dispute cases decided	1,009
Number of other cases disposed of	20,135
Number of duplicate Maps prepared	3,634

Number of Registers completed:—

Mouzahwar	Mouzahs	5,936
Mehalwar	Mouzahs	9,971

The estimated expenditure of the work in this branch is *Rs.* 1,87,036. 4. 11.

Detailed Returns (N 1 and N 2) of the professional and non-professional work accomplished during the year will be found in the Appendix, together with a statement (N 3), exhibiting the extent to which the survey records have been made use of by public officers and private individuals within the last five years.

STATIONERY.

Changes in the Department during the year.

At the suggestion of the Civil Finance Commission the Government of India authorised the introduction of certain changes in the stationery department during the year, with a view to the reduction of expenditure. The most important of these alterations are first, that the supplies from England hitherto received through the Home Authorities are henceforth to be obtained by contract with English manufacturers; and next, that the purchases made in this country are to be made by regular contracts. The rest of the changes have reference mainly to the substitution, to some extent, of cheaper qualities of paper and other articles of issue for the more expensive qualities now in use, and to the proper checking of the consumption of stationery in all departments.

Tenders for the supply of stationery.

In pursuance with the orders of the Government of India, the superintendent of stationery invited tenders for the supply of stationery for 1862-63 by public advertisement; and the Board of Revenue, after having had under their consideration the tenders which were submitted, and having inspected the samples sent with them, have accepted the most eligible offers. This has been intimated accordingly to the persons concerned, and the solicitor to Government is now engaged in drawing up contracts for their signature.

Operations of the year.

The operations of the year under report show that the total cost of stationery purchased during the year, plus the stock in hand at its commencement, amounted to 6,13,508 rupees, or less by 1,73,489 rupees than the purchases, importations, and stock of the preceding year.

The value of stationery issued was 4,23,704 rupees, which also exhibits a reduction to the extent of 81,661 rupees; and the value of mofussil purchases was 1,91,705 rupees.

The net amount realised on account of stationery sold was 6,184 rupees.

THE INDIGO DISTRICTS.

Precautions taken for the prevention of disturbances during the sowing season.

Some anxiety was naturally felt for the tranquillity of the Indigo districts during the sowing season, and every possible precaution was taken for the prevention of disturbances. The new arrangements for sub-dividing the districts of the Nuddea division had been completed before the season commenced, and one magisterial officer was appointed to each new sub-division. Extra deputy magistrates were also posted wherever their services were required, and detachments of Native Infantry, of the strength of 200 men each, were placed in the Sudder stations of the districts of Nuddea and Jessore. The magistrates of all the Indigo districts generally were further authorised to entertain extra bodies of police wherever they might find it necessary to do so, and they were directed to keep these in readiness, in compact bodies of not less than twenty-five men, that they might be rapidly moved about as occasion might require.

Notwithstanding these precautions, the year under review did not pass off altogether without disturbances. The specific acts of violence, however, were not many in number, and in most of them the offenders were arrested and punished. There were also illegal assemblies in several places; but the prompt appearance of the police put down these demonstrations in almost every case.

Measures taken for reconciling the differences between Planter-Zemindars and their Ryots in regard to the payment of rent.

The principal question indirectly arising out of the Indigo disputes which occupied the attention of Government during the year was the difficulty which was alleged to be experienced by the planter zemindars in the realisation of their rents. The Committee of the Landholders' and Commercial Association, in submitting a statement, showing the arrears of rent due to the planters from their ryots, stated that the amount was largely increasing, and that it was found practically impossible to recover the arrears through the ordinary courts. They urged, therefore, the re-appointment of a special Commission in the districts of Nuddea and Jessore for the purpose of remedying the evil. The necessity of taking some measures for that purpose was at once admitted by Government; but it appeared to the late Lieutenant Governor that the object in view would be better secured from energetic action in the way of exhortation and explanation, and the exercise of personal influence on the part of the ordinary sub-divisional officers on the spot. The Commissioners of Nuddea, Rajshahye, and Dacca were accordingly directed to issue strong injunctions to the sub-divisional officers under them to that effect, and the result was that the personal exertions of those officers in obtaining the payment of the undisputed demands for rent were attended with considerable success. It was found, however, at the same time that, in most of the cases, the questions at issue between the parties affected their interest in too vital a degree to admit of any compromise, and no settlement could, of course, be hoped for in such cases otherwise than by a legal decision of some competent tribunal.

Offer on the part of Government to assist Indigo Planters holding Talookdaree tenures with loans of money to save the tenures from sale for arrears of rent.

Several applications had been made by indigo planters for assistance from Government to enable them to save their Talookdaree tenures from sale for arrears of rent; and, considering that the Talookdars in such cases were unable to pay the rents due to their superior holder owing to the non-payment of the rents due to themselves by their ryots, the sanction of the Government of India was obtained to the offer of Government aid in the form of loans of money, upon solid security, for such time as the rents might remain unrealised. Very few applications, however, were received for such assistance, and eventually the power given to the local Government of granting the loans was withdrawn by the Government of India.

Endeavour made to persuade Planter-Zemindars to receive, and their Ryots to pay, on account, where the only dispute between them was about the rate or amount of rent due.

In submitting a further representation on the subject of the rent difficulty, the Committee of the Landholders' and Commercial Association solicited that the collectors might be authorised to allow time for the payment of the Government demand for revenue to any planter-zemindar who might satisfy them that he was unable to collect the rents due to him. In many cases it was stated that the difficulty in collecting rents was owing to disputes about the rate or amount of rent due, the ryots refusing to

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pay the demand of the zemindar in full, and the latter refusing to accept what the ryots admitted to be due. In such cases the sub-divisional officers were instructed by Government to use their good offices in endeavouring to persuade the zemindars to receive on account, and the ryots to pay to account, what the latter admitted to be due, leaving only the disputed portion of the claim to be settled at law.

Commissioners authorized to order a postponement of the Government demand for revenue from any Planter-Zemindar who might satisfactorily establish that his efforts to collect the rents due to him had been unsuccessful.

In other cases, on the planter-zemindar's establishing to the satisfaction of the Collector that he had done all that was reasonable to collect his rents without success, the Commissioners were authorised to order, on application, a postponement of the Government demand for revenue.

Appointment of two Special Officers to exercise the united powers of a Collector, Judge, and Commissioner, in respect of all suits under Act X. of 1859, in the Districts of Nuddea and Jessore respectively.

It was noticed in last year's Report that two Special Commissioners had been deputed to the Indigo districts, for the purpose of making inquiries into the alleged combination of the ryots against the payment of rent. The Reports which were submitted by these officers having been forwarded to the Government of India, it was remarked by that Government in reply, that the principal object which it had in view in suggesting the appointment of a Special Commission, had not been fully apprehended either by the local Government or the Special Commissioners, and that the success of the measure had accordingly been but partial. The object which the Government of India had primarily had in view, was explained to be the permanent and final adjustment of differences between the planter and the ryot, to effect which another Special Commission was directed to be appointed. But this order was subsequently modified on its being explained that, though Indigo was the origin of the differences, and was still, more or less directly, the main cause of misunderstanding, yet the form which they had now assumed was that of a general and vast enhancement of rents and eviction of ryots in masses; that the work to be accomplished was something approaching to the re-settlement of the districts where the excitement prevailed; and that the only plan which was likely to succeed under such circumstances consisted rather in the appointment of an officer to exercise the united powers of a collector, judge, and commissioner, in respect of all suits under Act X. of 1859, who could authoritatively settle the conflicting rights and interests of the parties at variance. The course suggested was approved by the Government of India, and has been carried out by the appointment of two additional officers, Messrs. E. Jackson and C. H. Campbell, to exercise the powers indicated in the districts of Nuddea and Jessore respectively, and they are now, with the aid of a selected staff of competent deputy collectors, engaged in deciding all rent disputes.

Defects in the practical working of Act X. of 1859 remedied by the provisions of Act VI. of 1862.

One defect in the practical working of Act X. of 1859, observed in the course of the inquiries made into the disputes between the planter-zemindars and the ryots, was the difficulty experienced by the former in the measurement of their lands, owing to the refusal of the ryots to attend at such measurements and point out their respective holdings. This difficulty has been obviated by Section X. of (Bengal) Act VI. of 1862, which provides an official measurement by the collector, on the necessary costs being deposited with him by the applicant. The same Act also provides that, in cases of wilful and unjustifiable repudiation of rents, the Court, in deciding such cases, shall be competent to award to the plaintiff, if necessary, additional damages not exceeding 25 per cent. on the amount of rent decreed, and, on the other hand, where the defendant shall appear to have been improperly sued, to award to him a compensation not exceeding 25 per cent. on the amount sued for; it also enables the ryot, without any suit being brought, to deposit with the collector, after tender, any rent which he may admit to be due, any balance which the zemindar may claim being sued for within six months.

Modification of the Cattle Trespass Act of 1857.

The insufficiency of the provisions of the Cattle Trespass Act of 1857, to prevent the wilful destruction of property, was considered, with reference to a representation made by Mr. Hills, of Nischindipore, that a law should be passed for enabling the authorities, in certain cases of injury to crops by cattle, to inflict a fine upon the whole of a village when the parties liable to the fine are not discovered. The expediency of passing such a law was not finally decided on during the last Sessions of the Council. In the meantime the Act of 1857 has been amended, so as to allow of a sentence of three months' imprisonment, or a fine of 200 rupees, or both, on any person who causes cattle to trespass on any land or on the crop cultivated on any land.

Instructions issued to explain to the Ryots that the Government was not opposed to the cultivation of indigo, nor desired to use its authority to force it.

Mr. Hills having also brought to the notice of Government that there existed a strange impression in the minds of the ryots in the Nischindipore quarter, that the Government was opposed to the cultivation of Indigo, instructions were issued to the local officers to spare no pains in dissipating this and any similar illusions that might be found to exist, care being taken, however, to avoid giving the equally mischievous impression that Government desired to use its authority to force the cultivation of indigo against the will of the ryot.

TEA CULTIVATION.

The statistics of the tea plantations must be accepted as approximate estimates rather than as accurate and carefully tested returns. They are based on information furnished chiefly by the planters themselves. In some cases the managers of factories have not complied at all with the application made to them for information, and in others the returns given are obviously inaccurate. The local officers report that there is much unwillingness on the part of the tea planters to make public the condition and progress of their plantations.

Cultivation in Assam.

The returns from Assam show that there were at the end of 1861, 160 plantations, held by 62 companies and individuals. Four of the former are public bodies, viz., the Assam Company, who have 24 plantations in Seebsagur, Luckimpore, and Durrung; the Jorehauth Company, who have two plantations in Nowgong; the East India Company, who have seven plantations in Seebsagur; and the Lower Assam Company, who have one plantation in Kamroop.

Of the private companies, 15 hold 19 plantations in Luckimpore, three hold five plantations in Seebsagur, one holds four plantations in Kamroop, and one holds one plantation in Nowgong.

The remaining plantations are all in the hands of private persons, 17 of whom are natives. Most of the native planters are in the Seebsagur and Luckimpore districts, but there is a small joint stock company of natives, who have planted a few beegahs in Gowalparah, and one or two individuals are trying the cultivation in a small way in Kamroop also.

The following statement exhibits the progress made in tea cultivation throughout the entire division:—

District.	Extent of Grant.	Extent of Cultivation up to 1860.	Extent of Cultivation up to 1861.	Out-turn of Crops for 1860.	Out-turn of Crops for 1861.	Increase.	Decrease.	Number of Labourers employed in Plantation.
	Acres.			*Lbs.*	*Lbs.*			
Kamroop - -	12,953	438	622	18,953¾	27,747	9,233	400	813
Durrung - -	3,939	445	1,077½	52,000	81,600	29,600	- -	825
Nowgong - -	7,025	155	797	70,400	96,110	25,710	- -	1,035
Seebsagur - -	27,158¾	—	7,561	10,17,199	11,59,860	1,16,430	1,71,117	7,302
Luckimpore -	20,143	2,754	3,165	3,32,320	4,23,420	95,100	400	3,318
Total - -	71,218¾	3,792	13,222½	14,90,872¾	17,88,737	2,76,073	1,71,917	13,293

The total area shown to be under cultivation is 13,222½ acres; but as many proprietors had not made any returns of their present cultivation, it is believed by the Commissioner of the province that the entire cultivated area amounts probably to not less than 16,000 acres.

Cultivation in Cachar.

In Cachar there are 31 tea plantations, of which six had furnished no returns to the Superintendent. The out-turn of the others for 1861 was estimated at 336,800 lbs. of tea, which is less than the estimated produce of the present season; but that is accounted for by the fact that the *quality* of the tea produced was more attended to during the year than the *quantity*, owing to some of the teas of last season having been found too coarse.

The following statement exhibits the working of the factories which had sent in returns to the Superintendent. The area under cultivation is shown to be 6,077 acres, and the number of coolies employed 5,871, of whom 3,609 were imported, and 2,262 local.

Number of Plantations.	Number of Factories.	Area under Cultivation.	Out-turn of the year.	Number of Labourers employed.
			Lbs.	
25	37	6,077	3,36,800	5,871

Up to the date of the Superintendent's Report, no less than 205 applications under the new rules for grants of land, varying from 500 to 15,000 acres, had been recorded. At the

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time of drawing up the last year's report there were only 52 Europeans settled in Cachar. This year there are 110, most of whom are tea planters. The amount expended every month by the planters in the district, is calculated at 50,000 rupees, and the value of the tea manufactured at 10 lakhs of rupees. The advantages which the district is deriving from the introduction of what must soon be one of the chief staples of India are incalculable. It must be remembered that this is only the fifth year since tea planting was introduced into Cachar.

The only drawback to success is the want of labour; the only remedy for which is the importation of coolies from Bengal. This has been already much resorted to, but the system under which it has been carried on has led to very great abuses, which, unless speedily remedied, will prevent labourers from emigrating to Cachar and Assam on any terms. As noted elsewhere, this subject is receiving the serious attention of Government.

The Plantations in Darjeeling.

The following statement exhibits the operations of the tea and coffee plantations in Darjeeling, so far as it has been possible to obtain information on the subject from the planters.

Number of Plantations.	Amount of Land Cleared.	Amount of Land actually planted.	Quantity of Manufacture in 1861.		Probable yield in 1862.		Number of Labourers employed.
			Tea.	Coffee.	Tea.	Coffee.	
	Acres.	*Acres.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	
30	8,767½	5,152½	27,983	8,200	78,244	2,460	4,819

The progress thus made in the extension of tea planting promises well for the future of this Hill Settlement. A great impetus to this cultivation will be given by the publication of the new rules for the grant of waste lands which are now pending the final orders of the Secretary of State. The Superintendent reports that every acre of culturable land in the district has been applied for.

As indicated in the statement, there is a small cultivation of coffee at Darjeeling, but this plant does not thrive there as the tea plant does, and the cultivation of coffee is decreasing. It will not grow apparently at a higher elevation than 1,500 feet, and is liable to great injury from the attack of worms and insects.

Of the number of coolies employed, about 4,000 are Nepaulese, 298 Lepchas and Bhooteahs, and the rest people of the plains. The returns give the general health of these people as good, though there was a great deal of small-pox among them, especially in the lower-lying plantations.

CALCUTTA BOTANIC GARDENS.

Scientific re-arrangement of living plants.

Considerable improvement was made during the year, in the manner of arranging the trees and plants in the Botanic Gardens, according to the botanical affinities. It would appear that, when the Botanic Gardens were first established, no definite plan was fixed upon for conducting the planting operations, the only method observed, apparently, being this, that trees of striking appearance were placed where, it was hoped, they would prove most effective in the landscape when full grown. The indiscriminate planting which has been going on ever since, has at last resulted in great confusion and over-crowding in certain places, while the usefulness of the garden as a scientific establishment has been considerably affected. To remedy this evil it has been determined gradually to introduce a scientific re-arrangement of the living plants, and an area of nearly one-third of the gardens is intended to be given over for a general arboretum. As a first step to the attainment of this object, a map of the gardens has been prepared on a large scale, and the general outlines of the plan to be followed marked out upon it. The sites for the different descriptions of plants have also been marked out by poles, with labels fixed on them.

Labelling of trees and plants.

Another improvement effected during the year is that the trees and shrubs near the most frequented roads have been labelled. The want of labels to indicate the names and nature of the plants was, for a long time, much complained of by the visitors of the gardens. To remedy this 400 labels made of zinc have already been put up, giving the botanical name of each plant, its English or native name, when known, and its native country.

Distribution of plants and seeds.

The distribution of plants and seeds from the Botanic Gardens were confined during the year to a system of exchange with scientific establishments and contributors. The number of Wardian cases given away was 26, each containing an average of 25 plants;

and the number of packets of seeds exchanged was 60, each containing from 50 to 100 species.

The gratuitous distribution of plants to private persons was confined to 549 specimens only. It has been found unnecessary to attend to private applications more largely, as all the plants that could be spared from the Botanic Gardens are now easily procurable from the numerous native nurserymen of Calcutta, or from the Agri-Horticultural Society. The usual supply of English and native vegetable seeds were sent to all European regiments indenting for them within a fixed time.

Contribution of plants and seeds to the Gardens.

The contributions received during the year consisted of 24 cases of plants, and 30 packets of seeds.

The Herbarium.

An annual grant of 600 rupees has been made for the support of the valuable herbarium attached to the Botanic Gardens, and the work of arranging the herbarium is being pushed on with vigour. In accordance with the plan followed in all English herbaria, the process of glueing down the specimens on sheets of paper was carried on in this country under the personal supervision of the Superintendent. A portion of the herbarium was at the same time similarly prepared in England by the men employed on that duty at the Royal Herbarium at Kew; and a much larger number of specimens has thus been rendered fit for cousultation than would have been the case had the whole work been left to be done in Calcutta.

The additions of dried plants made during the year consisted of (1st) two instalments of the Indian Herbarium of Drs. Hooker and Thomson; (2d) a small collection received from Dr. Mueller of the Melbourne Botanic Gardens; (3d) a collection of Ceylon plants received from Mr. Thwaites, Director of the Peradenia Botanical Gardens at Ceylon; (4th) a packet of interesting North American plants collected by Dr. Hector and received through Sir W. Hooker; (5th) an extensive collection of plants made by the superintendent in Java and Singapore; and (6th) a valuable collection of dried specimens prepared by M. Teysmann, Director of the Garden of Buitenjorg in Java.

The Library, &c.

An annual grant of 600 rupees has also been sanctioned for the support and preservation of the extensive library of botanical works attached to the Botanic Gardens, and a grant of 200 rupees a year has been set aside to cover the charges of printing a catalogue of the trees and plants in the Gardens, a guide-book, said to be very much wanted by the public, and other similar publications.

CULTIVATION OF CINCHONA.

Dr. Anderson's deputation to Java.

It has for some time past been considered desirable to extend to the hills of the Bengal Presidency the experiment of cultivating the cinchona plant, which has succeeded so well in the Neilgherry hills of Madras, and Dr. Anderson, Superintendent of the Calcutta Botanical Gardens, was deputed by the Government of India to inspect the cinchona plantations in Java.

Dr. Anderson received every assistance and attention from the authorities of Java, and brought back with him a large number of healthy plants. A few were retained for the experiments in Bengal, the rest were taken by Dr. Anderson to the nursery at Ootacamund, where he made over to Mr. McIver 50 plants of *Cinchona Calisaya*, Wedd; 284 plants of *Cinchona Pahudiana*, Howd; and four plants of *Cinchona Lancifolia*, the only four of this class ever introduced into India.

Proposal for the establishment of a Cinchona Nursery at Darjeeling.

In submitting the results of his investigations, Dr. Anderson suggested that a cinchona nursery should be established at Darjeeling, and, in authorising this proposition, the Government of India directed that the measure should be carried out in communication with the Local Government.

Steps taken in furtherance of that measure.

Dr. Anderson returned from Ootacamund with 193 plants, there were already in the Botanic Gardens 31 plants, and he retained from the Java collection 65 plants, and with most of these and about 550 seedlings and 400,000 seeds, he determined to commence operations at once at Darjeeling. Thirty-four of these plants died before dispatch; and with a view of testing further the experiment of rearing cinchona plants in the Botanic Garden, which had promised much success, Dr. Anderson left behind him in Calcutta 24 plants and cuttings. Instructions were given by the Government of Bengal to the Superintendent of Darjeeling to reserve a lot of 5,000 acres, to be selected by Dr. Anderson himself, within any part of the hills. In March the whole of the plants were sent off, Dr. Anderson at the same time proceeding to the hills to select a site for the plantation. The casualties in transit were considerable. Out of 59 of the Java plants only one died, while of the 170 Ootacamund plants he took with him 30 were lost; the whole of the seedlings of the *Cinchona Pahudiana* were lost by an accident which occurred through the stumbling of a coolie who was carrying the case in which they were packed up the hill. Dr. Anderson thus commenced operations at Darjeeling with only 211 plants; but the experiment has met with the most decided success, for, up to the present time, he has increased his stock to no less than 1,611 plants, of which 1,353 are of the *Cinchona Pahudiana*. The rate of propagation will increase every month, as in periods varying from three to six weeks, the new plants are ready to be artificially propagated in their turn. The site which has been selected is situated on the east of a spur of Sinchal—the mountain on which the European barracks are erected—in the midst of dense forest. As it was impossible to complete the necessary buildings in such an inaccessible situation before the rainy season came on, it was determined, as a temporary measure, to turn one of the empty subalterns' quarters into a propagating house, and this was accordingly done at a cost of 950 rupees. The sanction of the Government of India has been obtained to an expenditure of *Rs.* 14,735. 3. 2 for the year 1862-63, on account of the experiment, and a full Report will be submitted by Dr. Anderson of his proceedings after the expiration of that period.

SECTION X.—POLITICAL.

THE COSSYAH REBELLION.

Breaking out of the disturbances at Jowai.

Serious disturbances broke out in the Cossyah and Jynteah hills during the year under review. They commenced at Thannah Jowai in the Hill country, by the Cossyahs of Jowai, Jalong, Latober, and Shampong, in number about 200, surrounding the guard at Jowai, on the morning of the 17th January. The rioters were forced to retire at the time, but afterwards mustered 600 strong, about 40 of them being armed with muskets, and on the night of the 23d they set fire to the thannah, the mission school premises, and the houses of some of the Christian villagers and of others. The passes from Jynteah, Amwye, and elsewhere were also simultaneously closed.

Relief of the Thannah at Jowai by Colonel Richardson.

On hearing of this Colonel Richardson, commanding at Cherra, hastened at once with all his available men to relieve Jowai, where he arrived on the 25th January, and found the stockade, with its garrison of 60 men, in good order, but straitened for food and worn out with watching.

Commencement of military operations.

In conjunction with Major Rowlatt, Deputy Commissioner of the Jynteah hills, who also arrived early at the spot, he commenced an attack on the stockaded villages of the insurgents, four of which were speedily taken and destroyed, though, as far as could be ascertained, with little loss of men to the enemy.

Receipt of information by Government, and measures taken thereupon.

The first intimation of these disturbances was received by Government on the 24th January, and on the same date the Commissioner of Dacca was directed to send a detachment of the Eurasian Regiment from that station by steam to Sylhet. The Government of India shortly after ordered the dispatch thither of two Native Regiments, the 28th and 33d, from the Presidency.

Success of Colonel Richardson. Inadequacy of the troops under him to surround the rebels.

By the 17th March these regiments had all reached Sylhet. But the first outburst of the rebellion had received a check before they arrived, and on the 28th February Colonel Richardson reported that he had pressed the rebels to the edge of the hill country, had disposed guards around them, and only waited for the arrival of more troops completely to surround them. But the force under Colonel Richardson's command was not strong enough to keep the rebels inactive, and that officer appears to have considered the rebellion less general that it really was; for not only did the Cossyahs continue to stockade their villages about Jowai, but they made some offensive movements in the directions of North Cachar, Nowgong, and Gowhatty. These, however, were promptly met by the officers in charge of those districts.

The country declared to be in a state of rebellion, &c.

The rebellion proving more obstinate than had been anticipated, a proclamation was now issued (26th March 1862), forbidding the carrying of arms without license in the Cossyha and Jynteah Territory; and this was followed up by a proclamation, dated 2d April, declaring the country to be in a state of rebellion, and issuing a commission, under Act XI. of 1857, for the trial of the offences referred to in that Act.

Brigadier General Showers appointed Commissioner of the Cossyah and Jynteah hills.

At the same time, with the permission of the Supreme Government, Brigadier General Showers, who was already at Sylhet on a tour of inspection in his military capacity, was appointed Commissioner of the Cossyah and Jynteah hills, with full civil and military control throughout that tract.

Proclamations issued by Brigadier General Showers.

On receiving this appointment, Brigadier General Showers issued a proclamation to the people, calling upon all loyal subjects to assist him in restoring the peace of the district, and on all those who had rebelled to apply for pardon and return to their allegiance. He had previously laid down a Code of Rules for the observance of the detachments sent out for the subjugation of the rebels, prescribing that all men found in arms were to be treated as rebels; that the chiefs who were known to be instigators were to be captured and made over to the Civil Officer accompanying each detachment; that all stockades and fortified posts were to be destroyed, and all villages containing armed men to be attacked and burnt down if the villagers did not return to them peaceably; and that all rebels coming in were to give up their arms, and were then to be allowed to return to their homes, giving security for good conduct.

Success of the military operations carried on under Colonel Dunsford.

Meantime military operations were being carried on by Colonel Dunsford, the force having now been increased by the arrival of the 28th and 33d Native Infantry. It is not necessary to enter into a detailed account of these movements. The general plan pursued was that of reducing any stockades erected by the rebels, and, as far as possible, cutting off their supplies, while their rallying in large numbers was prevented by posting detachments at the strongest points throughout the hills. To pursue these wild tribes into their their jungles would have been only throwing men away. These measures were at the time so far successful, that, by the end of March, Brigadier General Showers reported that the military operations might be considered at an end. Major Rowlatt reported to the same effect, recommending the retention of the detachments posted throughout the country till a final settlement of the country. This opinion was endorsed by General Showers, who regulated the distribution of the troops at his disposal accordingly. The several parties posted were so arranged as to be within one or two days' march of one another, with a view to preventing the rebels from re-assembling in strength, or building up fresh stockades.

Causes of the rebellion.

The causes of this outbreak are very obscure, and are still under inquiry, Brigadier General Showers' final Report not yet having been received. It was attributed by Bengalee merchants, who were in the habit of trading in these hills, to the income tax, and by others to undefined anticipations of further taxation. On the other hand there were no visible signs of discontent when the tax was collected, as it was throughout the Jynteah hills. Some of those questioned by Major Rowlatt again made no mention of taxation as a cause, but spoke of the establishment of a Christian mission; to a prohibition to burn dead bodies in a certain place, which had been issued on sanitary grounds, but was interpreted to affect religion; and to the interference of the Jowai Darogah with a festival at Jalong, as having been what kindled the flame. General Showers also adds another possible cause of discontent, viz., the taking away of the shields of the Singtengs or Chiefs. Major Rowlatt inclines to believe that no one of these causes is in itself the true one, but that they may all have had more or less action in inciting to rebellion a people naturally turbulent. It was at one time supposed that some fugitives of the Chittagong mutineers were engaged in the outbreak, but this idea is not supported by facts. Nor does it appear that the outbreak in Nowgong, in which Lieutenant Singer lost his life, had any direct effect in stimulating this insurrection.

State of things at the close of the year.

Every effort was being made, after the close of the year, to obtain the submission of the people, and in the meantime the military operations were being carried on wherever they were still found necessary. The country was reported to be settling down, and it was believed by the local authorities that, at the close of the rains, the state of the country would allow of the troops being finally withdrawn. It is probable that many who still hold out are prevented from surrendering only from fear of punishment, and from suspicions of our intention towards them.

Raids by the Kookies on the south of Sylhet.

It should perhaps be here noticed that, shortly after the outbreak of the Cossyahs, a tribe of Kookies was reported to have committed three murderous raids on the south side of the Sylhet valley, killing several persons, and carrying away others as prisoners. One of these outrages, at Thannah Rajnugger, occurred within British territory; the other two, at Nowcolly and Lushkurpore, were committed within the jurisdiction of Independent Tipperah.

The outrage within our territory was committed on the 22d January, several persons were killed in the burning of the village, and several others kidnapped. The number of houses burnt was 28. This matter is still under investigation. The Nowcolly affair happened on the same date. It seems that certain persons returning from the hills of Tipperah were set upon by some 100 or 125 Lengta Kookies, and two or three of them killed. In the Lushkurpore outrage the Kookies attacked and killed some Tripuras, and a person who went up the hills to bring cotton was never again heard of.

The connexion of these Kookie outrages with the rising of the Cossyahs has not been established.

RIOT AT PHOOLGOORIE, IN NOWGONG.

The meetings of Ryots in large bodies at Phoolgoorie.

A lamentable disturbance occurred during the year at Phoolgoorie, in Nowgong, in which Lieutenant Singer, the Assistant Commissioner of the district, lost his life. Lieutenant Sconce, the Deputy Commissioner in charge of the district, having, about the 15th October, heard that large bodies of ryots had been for some days holding meetings at Phoolgoorie, which is about 10 miles distant from the Sudder Station, ordered the Darogah of Nowgong on the 14th October to watch the people and find out the ringleaders. The darogah, on the 17th, reported that the ryots were mustering in too great force to admit of his arresting the leaders of the movement, and he was therefore reinforced by a mohurir, two burkundauzes, and four men of the Police Militia, armed as Sepoys. The darogah also reported a remarkable reply made by the crowd when called upon to disperse. They said that "to go to the Cutcherry to complain and hope to bring their grievances to the ears of the Huzoor, was out of the question, for if they attempted to enter the courthouse they were thrust out by peadahs and fined; consequently they had thus assembled in body to look after their interests, and would remain consulting for five days, till all the people who had still to arrive from very many other villages had collected also."

Lieutenant Singer's deputation to that place, his altercation with the mob, and the manner in which he was killed.

On the following morning, 18th October, Lieutenant Singer was sent out to Phoolgoorie by Lieutenant Sconce; and when the people assembled, he went to the spot with the police and addressed the crowd, asking the objects of their meeting. They stated through a spokesman—Jaka Kolita—that their chief ground for complaint and dissatisfaction was that having before been lightly taxed they were now heavily assessed, and that again a fresh tax, &c., alluding probably to the license tax, was about to be introduced. They said they had met to consult on these matters. Lieutenant Singer suggested that if that were the case they had better put away the sticks which a large number of them carried. This the mob refused to do. Lieutenant Singer then ordered the police to take away their sticks. When it was attempted to carry out this order, the assembled men who had been sitting arose, and one of the mob struck a policeman. Lieutenant Singer then seized the stick of the striker, and at this instant Baboo Doom felled the unfortunate young officer to the ground by a blow on the head. Upon this the whole crowd set upon Lieutenant Singer and the police. Shortly after the mob seem to have retired to some distance, leaving Lieutenant Singer for dead. Life, however, was not quite extinct. But when some persons went up with water to try and revive him, a portion of the mob drove them away, and, as has since transpired on the trial, again beat the wounded officer till he died. Lieutenant Singer was on foot, and the whole of the police force with him consisted of two darogahs, a mohurir, a jemadar, 13 burkundauzes, and four police sepoys.

News of the death of Lieutenant Singer reached the Deputy Commissioner of Nowgong that evening, accompanied by rumours of an intended attack on the town. He therefore detached a portion of his small guard to look for the body of the deceased, and took up his position at the Treasury with the remainder. He also sent an express to Tezpore for assistance. The sepoys who went out to look for the body were met by the ryots, who hustled them, and used such violence as compelled them to fire into the crowd, in order to make good their retreat.

Steps taken subsequent to that event, arrest of the guilty parties, &c.

Immediately on receiving intelligence of the disturbance, which he did at Tezpore on the evening of the 19th, Major Hopkinson, Commissioner of Assam, took advantage of the presence of the steamer "Lucknow," to convey Major Campbell and 50 sepoys to Lokqua Ghat, from which they advanced by land to Nowgong. Major Hopkinson then proceeded with all speed to Gowhatty for further reinforcements, and reached Nowgong himself with Captain Chambers, and an additional force of 80 men, on the 23d. By this time all was quiet again, and Lieutenant Sconce was engaged without opposition in arresting the guilty parties and conducting the preliminary investigation necessary for their trial. The Commissioner, on grounds that admit of no doubt, came to the conclusion that the origin of the outbreak lay in the apprehensions which had been excited in respect to the impost to be levied on pan, and to the duty on arts and trades. The bill for the first of these had not yet passed, and the latter had not yet been introduced, but to the credulous minds of the ignorant peasantry the rumours of increased taxation were all the more terrible from their vagueness. The recent imposition of the income tax had, in Major Hopkinson's opinion, prepared the Assamese to believe any absurd rumour regarding taxation which ill-disposed or ill-informed people might circulate.

Result of the inquiries made in regard to the causes of the riot.

It was shown that on two occasions previous to the fatal outbreak the ryots had assembled at the Deputy Commissioner's cutcherry in a more or less tumultuous manner to urge their objections regarding taxation. Due importance had not been attached by the Deputy Commissioner, Lieutenant Sconce, to these indications of strong popular feeling and excitement. It also appeared that he had been in the habit of fining men attending his court, on the plea of their disturbing the court, and had thus to a great extent lost the confidence of the people. He entirely under-estimated the danger to which he allowed Lieutenant Singer to expose himself, and is also shown to have failed in meeting the complaints of the people in a proper spirit, and on these grounds has been reduced to the rank of an Assistant Commissioner, as wanting in the judgment necessary to qualify him for independent charge of a district.

Trial, conviction, and punishment of Lieutenant Singer's murderers.

It is only necessary to add in this place that nine persons were tried for the murder of Lieutenant Singer, and convicted by the High Court, six being sentenced to transportation for life, two to banishment for 14 years, and one to imprisonment with labour and irons for seven years.

EXCITEMENT IN THE SONTHAL DISTRICT.

Receipt of the intelligence.

In May 1861, when the Lieutenant Governor was in camp at Parisnath, intelligence was received from the Assistant Commissioner of the Nya Doomka Division that there were signs of approaching disturbance among the Sonthals of his part of the country, and that a sense of insecurity prevailed among the inhabitants, many of whom contemplated leaving the neighbourhood of Nya Doomka.

Measures taken to avert danger and inquire into the causes of dissatisfaction.

With a view to restore confidence and to avert any possible danger, a detachment of the 1st Police Battalion, 100 strong, was immediately dispatched from Sooree. The Deputy Commissioner was directed to proceed at once to the scene of excitement, and the former Deputy Commissioner, Mr. Robinson, who was then also officiating as Commissioner, was directed to proceed at once from Purneah to the Sonthal Pergunnahs; and, as the presence of an officer of experience and standing capable of acting on any emergency was considered desirable, Mr. Plowden, the Commissioner of Burdwan, was deputed to inquire into the causes of dissatisfaction amongst these people, which were vaguely reported to be in some way connected with the enhancement of rent and the institutions of suits by mahajuns.

Result of the inquiry.

Mr. Plowden, after a very careful inquiry, reported to Government that there was actually no disturbance, and that none had been seriously contemplated; but that there was much real excitement among the Sonthals, caused principally by the proceedings of Mr. C. Barnes, a farmer of an estate under the Court of Wards, who had had the lands measured, and had enhanced the ryots' rents—chiefly in one pergunnah—to an extent beyond what they were able to pay.

Amicable adjustment of matters between Mr. Barnes and his ryots.

On the arrival of Mr. Robinson at Doomka Mr. Plowden was relieved; and the former officer, in concurrence with the opinion come to by Mr. Plowden, gave his decided opinion that there was no reason to fear a rise on the part of the Sonthals. He at once opened negociations with the ryots and mustajirs of Pergunnah Hendwah on one side, and Mr. Barnes on the other, which resulted in an amicable adjustment of the matter; Mr. Barnes consenting to withdraw his settlement which had occasioned so much discontent, and to accept an increase of 25 per cent. on the whole estate, to which the ryots readily agreed. It was believed that Mr. Barnes had spent considerable sums of money in improving the estate.

Mr. Barnes, by readily accepting the more reasonable increase of 25 per cent., showed much good feeling and judgment. The arrangement made by Mr. Robinson put an end to all differences between Mr. Barnes and his ryots, and left him with a fair profit on his farm, and a quiet and contented tenantry.

DISTURBANCES IN SUMBULPORE.

The administration of Sumbulpore assumed by the British Government in 1849.

Sumbulpore stands on the Mahanuddy river, half way between Cuttack and Eastern Nagpore. It originally formed part of the dominions of the Bhonsla family, and was ceded to the British Government by Appah Saheb and Rughojee Bhonsla in 1816 and 1826. All its civil, police, and judicial administration continued, however, for nearly a quarter of a century following its cession, to be conducted by its own Rajahs. The direct management of its affairs was assumed by the British Government in 1849, when the last Rajah, Naryan Sing, died without heirs, after expressing a wish on his death-bed that the administration of this tract of country should pass into the hands of the British Government. The introduction of British rule was followed by necessary changes in the various branches of administration, which have been already described by Mr. Ricketts in his Report on the district, published among the selections of this Government, No. XX.

The part taken by its Zemindars and Talookdars in the late rebellion.

Sumbulpore of late has obtained notoriety for the part taken by its Zemindars and Talookdars in the late rebellion. The unsettled state of the district has up to a late date been a source of anxiety to the local authorities and Government.

It is necessary to mention what were the chief disturbing causes.

Among the prisoners released from the Hazareebaugh jail by the mutineers of the 8th Regiment Native Infantry, were two brothers, Soorunder Sahee and Oodunt Sahee. They were related to one of the late Rajahs of Sumbulpore, and were under sentence of imprisonment for life, having been concerned in a serious affray in which some lives had been lost. These men soon after their release entered the Sumbulpore district, where a number of followers soon collected round them. They laid claim to the Government of

Sumbulpore, and with the aid of a large number of retainers, amongst whom were several influential Zemindars, they attacked Captain Leigh, the Senior Assistant Commissioner, who had moved out against them with a detachment of the 40th Native Infantry, and under cover of the dense jungle they succeeded in killing and wounding several of his men. The Dâk road to Bombay was obstructed, two of the Dâk stations were burnt down, whilst large bodies of rebels collected in various directions and committed every description of excess.

Had it not been for the timely arrival of military reinforcements from Madras, Nagpore, and other quarters, and for the Sebundy levy which had been raised among the Goomseas, the authority of Government over a wide extent of territory would have been suspended. Active operations against the rebels were at once undertaken, and, considering the unfavourable nature of the country, with some success; many influential men being forced into surrendering themselves to the authorities.

Transfer of the district to the charge of the Commissioner of Cuttack.

The entire civil and military control was, for a short time, vested in Colonel Forster, whose health, however, compelled him to resign the appointment. The district was then transferred to the charge of the Commissioner of Cuttack, a measure which had been long before recommended by Mr. Ricketts. At the same time a strong force of military police, under the command of Major Rattray, the Inspector General, was sent into the district, for the purpose of carrying on any military operation which might, in the opinion of the Commissioner, be necessary.

On the arrival of Mr. Shore, the Officiating Commissioner of Cuttack, at Sumbulpore, he found that matters had greatly improved,—the district had already settled down into some order. Several rebels and insurgents had availed themselves of the terms of the royal amnesty, and had returned to their allegiance.

The ringleaders and inciters of the outbreak were however still at large, wandering about in the jungles and seeking an opportunity of doing further mischief. The names of the chief of these fugitives were Soorunder Sahee and his brother Oodunt Sahee; Kanhoo Naik and Khuggo Naik, of Kolaberea; Khuggessur Dao, of Banda; Monohur Sing Mahaputter, Komul Sing, Koonjul Sing, and Huttee Sing, of Pergunnah Ghais.

Offer of free pardon and restitution of property to the rebels, and its effect.

The Deputy Commissioner, Major Impey, urged the adoption of a policy of conciliation, which was to be carried out, not only by offers of pardon to such of the rebels as had hitherto been afraid to come in, but by promise of restitution of the estates which had been confiscated by Government. The grounds of his recommendation were that those who had originally surrendered had not received such fair treatment as would encourage others to follow their example, and that those still holding out had been deprived by the confiscation of their estates of all inducement to return, for their homes and estates being in the possession of others they would have to live for the rest of their lives as paupers. These circumstances, taken in connexion with the natural obstacles offered by the hilly and jungly nature of the country, to the successful conduct of military operations, satisfied Government that the policy proposed by Captain Impey was the only one likely to lead to a speedy and permanent settlement of the country; indeed, there was too much reason to believe that the policy pursued by the local authorities from the very commencement of the disturbances in 1857, was such as to create mistrust and to foster rebellion, rather than to promote confidence and encourage loyalty. Two proclamations were accordingly issued by Captain Impey, one on the 24th September 1861, offering free pardon and restitution of confiscated property to all rebels with the exception of Soorunder Sahee, Oodunt Sahee, and Mitter Bhan, son of Soorunder Sahee; and the other on the 4th of October following, offering a free pardon to Mitter Bhan, and a guarantee of life to the two excepted in the first proclamation. These proclamations had the desired effect. Within two months from the issue of the second proclamation, Kanhoo Naik and his father Khuggo Naik, with a large party of followers, surrendered themselves to Major Impey, and their confiscated estate of Jaipore was restored to them.

From this time forward Mr. Shore, in concert with the Deputy Commissioner, was engaged in opening communication with the remaining rebels, and encouraging them to surrender. His instruments were principally village Gounteahs, or Serburakurs of known influence with the rebels, but who had nevertheless been throughout loyal servants of Government. These men went backwards and forwards between Sumbulpore and the rebel haunts, encountering some personal risk and very great exposure and exertion.

The surrender of Kanhoo Naik and Khuggo Naik was followed by that of Mitter Bhan, son of Soorunder Sahee. He was restored to the two lakheraj villages, which were enjoyed by him before the mutiny broke out.

Next came in Oodunt Sahee, who was told by Mr. Shore that though Government would not call on him to act against either his brother or the men who had sacrificed everything for his family, he was none the less bound to serve the Government which had treated him with such leniency; and that the best proof he could give of his gratitude and loyalty was to obtain the submission of the remaining rebels. This mission he cheerfully accepted, and started a few days after he had come in for the south-west corner of the district, where it was believed the rebel leaders had assembled. But Oodunt Sahee had incurred considerable odium among the southern rebels by surrendering without consulting them, and he only succeeded in bringing over Huttee Sing, who was however by far the most influential of Soorunder's few remaining adherents. The estate of Ghais was restored to Huttee Sahee at an enhanced jumma.

The pacification of the district having been thus secured, Mr. Shore left Sumbulpore on the 20th February, leaving instructions with Major Impey to dispense with the services of the 8th Police Battalion gradually as the country settled down, the rest of the Police Battalions with Major Rattray having some time before been sent back to their stations.

The entire success of the operations of the last year Mr. Shore attributes to the policy of conciliation originally recommended by Major Impey, and which he was able to carry out not only by the offer of free pardon but by the restoration to the rebels of their confiscated estates. After Mr. Shore's departure, the last rebel Chief, Soorunder Sahee, surrendered himself to Major Impey, and there is thus every prospect of a continuance of quiet and order in the province.

Transfer of Sumbulpore to the Central Provinces.

It only remains to note that by a notification of the Government of India, in the Foreign Department, dated 30th April 1862, the district of Sumbulpore, with its dependencies, was taken under the immediate authority and management of the Governor General, and placed under the Chief Commissioner of the Central Provinces.

DISTURBANCES IN BOAD.

In the beginning of this year a disturbance broke out in Killah Boad, in the tributary mehals of Cuttack. It apparently originated indirectly in some dispute between the rajahs of Sonepore and Boad respecting the right to a tract of country called the Bara Bhaya Des, which is divided into 12 des or moothas, and is principally inhabited by Kundhs. The country was formerly under the nominal sway of Boad; but it was alleged by the people that it was twice made over to Sonepore by the Boad Rajah, once in return for some assistance rendered by the Rajah of Sonepore, and once as a marriage portion. In 1830, a suit was brought by the Sonepore Rajah, who was not in actual possession, for the whole or a portion of this territory, consisting of the principal mootha, pachera, which was decreed in his favour by the Commissioner of Cuttack. Thus Pachera remained as before attached to Sonepore, and the rest of the country was declared to belong to Boad. The Kundhs, however, were very anxious to get back Pachera, and applied to the Boad Rajah for his assistance, but without success.

Attack on the Boad Rajah by the Kundh rebels.

The Boad Rajah has, by his arbitrary and oppressive conduct, for a series of years been exasperating the Kundhs, who seemed to be of opinion that he could not have carried matters with so high a hand if their strength had not been broken by the separation of Pachera from the Bara Bhaya Des, and the loss of their head zemindar. The smouldering discontent at last broke out, and on one occasion, when the Rajah had proceeded to a place called Kumghaut, on the Tel River, some 10 or 12 miles south of Sonepore, for the purpose of inquiring into a case of plundering, he was surrounded and attacked by more than 1,000 Kundhs. Five of his Paiks were killed on the spot, and five others were wounded. A party of Sebundies, sent to his aid by the Khajoorparra Tehsildar, were obliged to act on the defensive, and were fired at. By good management, the Havildar in command of the party succeeded in effecting the release of the Rajah. The Rajah suspected that the Kundhs had been instigated and protected by the Sonepore Rajah, with whom he has a quarrel of long standing; but there is no proof of this, and there is sufficient reason to believe that the tyrannical conduct of the Boad Rajah and his own amlah was the principal cause of the outbreak.

Measures taken for suppressing the disturbance.

Certain terms were offered to the rebel Kundhs by the Superintendent of the tributary mehals with a view to effect a settlement of their grievances. At first they agreed to accept the terms; but subsequently retracted, and assumed a position which rendered it imperative to employ force to coerce them. Measures were consequently adopted by the Superintendent, with the approval of Government, for suppressing the disturbance. Several expeditions were formed and dispatched against the rebels, and in the engagements which took place some lives were lost. The Superintendent was requested to use every endeavour to bring these wild and uncivilized men back to their allegiance, by promising them pardon and redress of any substantial grievance of which they might have to complain, the chief ringleaders only being reserved for punishment.

Surrender of the leader of the rebels, as well as of the principal Sirdars.

The latest reports received from Mr. Shore were of a satisfactory nature, showing that the rebels were anxious to make their peace with Government, and that Narain Mullick, the ostensible leader of the rebels, as well as the principal Sirdars, had surrendered. In the southern part of the disturbed district, where some of the Kundhs still held out, a little affair occurred in which the Kundhs were defeated by a detachment of the police with some loss. Since this the country has settled down, the people have returned to their villages, cultivation is actively progressing, and nearly the whole of the remaining ringleaders had surrendered themselves to the Superintendent.

BOOTEAH AGGRESSIONS.

Bootanese outrages on our territory and in Cooch Behar and Sikhim.

Our relations with the Government of Bootan have for some time been on a very unsatisfactory footing. Constant raids have been made upon our territory, property has been plundered, the lifting of cattle and carrying off of elephants has been of frequent occurrence, and our subjects have been seized in their houses and carried away prisoners into Bootan. Similar outrages have been perpetrated on the inhabitants of Cooch Behar and Sikhim.

Our remonstrances ineffectual. Necessity for adopting coercive measures, and resolution to attach the rents of the Bootan Mehel, Ambarree Fallacotta.

Our representations to the Bootan authorities have been entirely ineffectual. We have made many demands for the surrender of the delinquents, and for the restoration of our subjects, and those of Cooch Behar, who were kept in confinement in Bootan; but these demands have been systematically evaded. At length, in the beginning of 1860, it became necessary to adopt more stringent measures. As a first step it was resolved to withhold payment of the rents of the Bootan Mehal, Ambarree Fallacotta, until full reparation was made. Ambarree Fallacotta is a tract of country on the west side of the Teesta, about 20 miles within our frontier. It was ceded by the British to the Bootan Government upwards of 70 years ago. The collection of the revenue by the Bootanese officers from their farmers, however, gave rise to frequent disturbances, and, from the situation of the estate, to the violation of British territory. The British Government consequently in 1842 found it necessary to take upon itself the responsibility of farming out the estate, undertaking to pay the rents that might be derived from it to Bootan. Since 1844 these rents have amounted to 2,000 rupees per annum.

Redress once again demanded, and the rent of Ambarree Fallacotta withheld.

Previous to adopting coercive measures, Government once again addressed the Deb Rajah of Bootan, reiterating these demands, and informing him that if they were not conceded, steps would be taken to enforce them. This communication not having the desired effect, orders were issued in February 1860 for the stoppage of the rents of Ambarree Fallacotta, and the Deb Rajah was informed that they would not be restored until we received full reparation for past offences.

Payment of the rents of Ambarree Fallacotta frequently demanded. Further depredations reported. The Soobahs and Katmahs suspected of being the instigators.

We have since received several demands for the payment of these rents from the Soobah of Dalimkote, a provincial Commissioner in the frontier, through whom they were annually remitted to the Bootan Government, but no redress has yet been obtained; on the contrary, not only have our just demands on the Bootan Government been disregarded, but frequent further aggressions by its subjects have been brought to notice. Events have also recently transpired which afford ground for suspecting that most of the depredations on our territory are at least connived at, if they are not actually instigated, by the provincial Commissioners on the frontier, designated Soobahs and Katmahs.

Interview between the Soobah of Mynagoorie and the Deputy Magistrate of Titalyah.

In March last one of these soobahs, the Soobah of Mynagoorie, requested the deputy magistrate of Titalyah to meet him, that he might make over to him certain British subjects who had offended against the laws of Bootan, and whom he consequently had confined. The deputy magistrate granted the interview and went to the frontier to meet the soobah; he asked for the delivery over of the British subjects, promising to punish them in the event of the charges against them being duly established. The soobah agreed to do this on condition that a certain Bootanese refugee was delivered up by the magistrate. On search being made, it was found that the person demanded was not within our territory. The soobah next demanded the punishment of a number of British subjects who had committed aggressions in Bootan. The deputy magistrate asked for proof of their criminality, but was met with a demand that the men in question should be punished first, evidence of their guilt being furnished subsequently. Eventually the soobah declined to make over the British subjects whom he had in confinement, and evaded compliance with all the representations made to him by the deputy magistrate regarding the plundering of villages, and the theft of cattle and elephants; and the interview was thus attended with no satisfactory result.

Hostile preparation in Bootan, and dispatch of British troops to the frontier.

About the beginning of the current year the Superintendent of Darjeeling and the Government officers on the frontier reported that the Bootanese were making hostile preparations for the purpose of entering our territory, and occupying Ambarree Fallacotta, and that an attack on Darjeeling was apprehended. Two companies of Her

Majesty's 38th Foot, and a wing of the 10th Native Infantry were immediately dispatched from Dinapore to the neighbourhood of Darjeeling, and a wing of Irregular Cavalry from Oude to Julpigooree. The presence of these troops has restored confidence on the frontier.

Interview between the Durpun Rajah and the Agent to the Governor General, North East Frontier. The Durpun Rajah's remarks regarding the Bootanese outrages. The letters purporting to be replies from the Deb Rajah to our demands for redress, believed to be spurious.

In March last the agent to the Governor General, North East Frontier, reported the result of an interview between himself and the Durpun Rajah, who was deputed from the Court of Bootan with despatches for the agent. No mention was made in these despatches of the outrages we had complained of. The Rajah had merely been sent for the purpose of receiving the annual allowance we make to Bootan for certain dooars, amounting to about 10,000 rupees, and, if possible, to obtain an increase of 2,000 or 3,000 rupees to the allowance. Nothing transpired regarding stoppage of the rents of Ambarree Fallacotta. There is reason, therefore, for suspecting that they have never been remitted to the Deb Rajah, but appropriated by the Soobah of Dalimkote; and our failing to obtain redress from the Bootan Government by withholding them, is thus easily explained. During the conference the agent spoke of the outrages of the Bootanese on our territory, and the evasive replies of the Deb Rajah to our demands for redress. The Durpun Rajah replied that no complaints from the agent had reached the Deb Rajah. He observed "that there were a great many soobahs or dooars, and a great many kinds of people in them who made mischief in them, and that the Deb Rajah really did not know what went on in the dooars. What goes on in the dooars is concealed from the Deb Rajah." There is every reason to believe that this is a correct representation of the condition of the administration of Bootan. It is probable that the revenue of Ambarree Fallacotta is annually appropriated by the Dalimkote Soobah, and that the Deb Rajah is thus unaware of its attachment. The letters that purported to be replies from the Deb Rajah to our demands for redress were doubtless the spurious productions of some of the soobahs or katmahs, through whom all our communication to the Bootan Government are transmitted.

Resolution to send a mission to Bootan.

Viewing the past history of our relations with this country, the Government have come to the conclusion that all attempts at placing our relations with the Bootan Government on a satisfactory footing will be ineffectual, unless we contrive to open an uninterrupted communication with the Deb Rajah. The Government have accordingly determined on sending a mission into Bootan, as the only means of explaining the precise nature of our demands and the measures we shall be compelled to adopt if they are not conceded.

Information of the intended mission received with pleasure by the Durpun Rajah.

During the conference between the agent to the Governor General, North East Frontier, and the Durpun Rajah, the former mentioned our intention of sending a mission to Bootan. "The Rajah did not appear in the least startled" at the announcement; "on the contrary, he seemed to like the idea, and volunteered the offer to make the mission comfortable if they came; that he would come and meet them, bringing all sorts of provisions with him, and treat them as well as we had treated him."

Arrangements in progress for the dispatch of the mission.

Arrangements are in progress for the dispatch of the mission in the ensuing cold season.

THE LIEUTENANT GOVERNORSHIP OF BENGAL.

Resignation of Sir John Peter Grant, and succession of Mr. Beadon.

The Government of Bengal was administered by the Honourable Sir John Peter Grant up to the 22d April last. On the 23d of the month Sir John Peter Grant resigned the office of Lieutenant Governor, and was succeeded therein by the Honourable Cecil Beadon.

Chap. IX.
Bengal.

APPENDIX to the Bengal Administration Report for 1861-62.

(A. 1.)

Rough Estimate of the Strength of an Organized Civil Constabulary.

DIVISIONS.	Europeans.						Natives.									
	District Superintendent.			Assistant Superintendent.			Inspectors.			Sub-Inspectors.			Overseers.			
	First Class.	Second Class.	Third Class.	First Class.	Second Class.	Third Class.	First Class.	Second Class.	Third Class.	First Class.	Second Class.	Third Class.	First Class.	Second Class.	Third Class.	Privates.
Patna - -	1	3	–	2	4	5	16	31	31	37	37	37	37	37	37	3,700
Bhaugulpore -	1	–	1	2	3	3	8	18	18	22	22	22	22	22	22	2,200
Rajshahye - -	1	1	2	3	2	7	16	30	30	36	36	36	36	36	36	3,600
Dacca - -	1	–	3	1	4	4	11	22	22	26	26	26	26	26	26	2,600
Chittagong - -	1	1	–	1	3	2	8	16	16	18	18	18	18	18	18	1,800
Nuddea - -	1	2	–	1	4	4	11	22	22	26	26	26	26	26	26	2,600
Burdwan - -	2	–	2	2	2	6	13	26	26	31	31	31	31	31	31	3,100
Cuttack - -	–	–	1	3	1	4	9	15	15	19	19	19	19	19	19	1,900
Chota Nagpore -	–	1	–	2	2	3	9	15	15	18	18	18	18	18	18	1,800
Assam - -	–	–	–	3	5	2	6	12	12	14	14	14	14	14	14	1,400
Total - - -	8	8	9	20	30	40	107	207	207	247	247	247	247	247	247	24,700

Cost.

		Rs.	a.	p.	Rs.	a.	p.
1	Inspector General - - - - - - -	3,000	–	–	3,000	–	–
4	Deputy Inspectors General - - - - -	1,200	–	–	4,800	–	–
4	" " " - - - - -	1,000	–	–	4,000	–	–
8	District Superintendents, 1st Class - - - -	700	–	–	5,600	–	–
8	" " 2d " - - - - -	600	–	–	4,800	–	–
9	" " 3d " - - - - -	500	–	–	4,500	–	–
20	Assistant Superintendents, 1st Class - - -	400	–	–	8,000	–	–
30	" " 2d " - - -	300	–	–	9,000	–	–
40	" " 3d " - - -	200	–	–	8,000	–	–
107	Inspectors, 1st Class - - - - - -	150	–	–	16,050	–	–
207	" 2d " - - - - - -	100	–	–	20,700	–	–
207	" 3d " - - - - - -	70	–	–	14,490	–	–
247	Sub-Inspectors, 1st Class - - - - -	25	–	–	6,175	–	–
247	" 2d " - - - - -	20	–	–	4,940	–	–
247	" 3d " - - - - -	16	–	–	3,952	–	–
247	Overseers, 1st Class - - - - - -	14	–	–	3,458	–	–
247	" 2d " - - - - - -	12	–	–	2,964	–	–
247	" 3d " - - - - - -	10	–	–	2,470	–	–
8,000	Constables, 1st Class - - - - - -	8	–	–	64,000	–	–
8,000	" 2d " - - - - - -	7	–	–	56,000	–	–
8,700	" 3d " - - - - - -	6	–	–	52,200	–	–
	Clothing and Arms - - - - - -	-		-	16,000	–	–
	Contingent charges - - - - - -	-		-	16,000	–	–
	Total - - - Rs.				3,31,099	–	–
	Or a yearly charge of "				39,73,188	–	–

(A. 2.)

STATEMENT showing the Number and Cost of MOHURIRS, and the Cost of the SERISHTADARS and HEAD CLERKS as hitherto existing in the Magisterial Establishments in *Bengal*, and the revised Establishments of Mohurirs and Head Clerks, as sanctioned by Government in February 1862.

MAGISTRACIES.	Establishment as proposed by the Civil Finance Commission.				Existing Establishment in 1860.				Establishment as sanctioned in 1862.				Present Cost of the two Offices of Head Clerk and Serishtadar.			Proposed Salary of the Office of Head Clerk after union with that of Serishtadar.		
	No.*	Cost.			No.	Cost.			No.	Cost.								
		Rs.	*a.*	*p.*		*Rs.*	*a.*	*p.*		*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Monghyr - -	5	80	–	–	7	80	–	–	6	100	–	–	90	–	–	80	–	–
Cuttack - -	3	50	–	–	7	109	–	–	3	50	–	–	110	–	–	80	–	–
Balasore - -	3	50	–	–	5	79	–	–	3	50	–	–	100	–	–	80	–	–
Pooree - -	3	50	–	–	3	39	–	–	3	50	–	–	90	–	–	80	–	–
Chumparun -	3	50	–	–	7	95	–	–	3	50	–	–	100	–	–	80	–	–
Bogra - -	3	50	–	–	5	53	–	–	4	65	–	–	90	–	–	80	–	–
Maldah - -	3	50	–	–	5	49	–	–	3	50	–	–	65	–	–	80	–	–
Pubna - -	3	50	–	–	8	81	–	–	4	65	–	–	95	–	–	80	–	–
Noacolly - -	3	50	–	–	5	49	–	–	5	80	–	–	100	–	–	80	–	–
Chittagong - -	3	50	–	–	8	92	–	–	6	100	–	–	110	–	–	80	–	–
Shahabad - -	4	65	–	–	6	63	7	2	4	65	–	–	100	–	–	80	–	–
Howrah - -	4	65	–	–	7	94	–	–	4	65	–	–	105	–	–	80	–	–
Bhaugulpore -	4	65	–	–	3	39	–	–	5	80	–	–	115	–	–	80	–	–
Furreedpore -	4	65	–	–	14	180	–	–	8	130	–	–	110	–	–	80	–	–
Rajshahye - -	5	80	–	–	17	173	–	–	7	115	–	–	105	–	–	100	–	–
Backergunge -	5	80	–	–	8	106	10	10	8	130	–	–	110	–	–	100	–	–
Behar - -	5	80	–	–	7	123	–	–	5	80	–	–	100	–	–	100	–	–
Jessore - -	5	80	–	–	10	119	–	–	8	130	–	–	110	–	–	100	–	–
Nuddea - -	5	80	–	–	11	178	–	–	4	65	–	–	110	–	–	100	–	–
Purneah - -	5	80	–	–	12	175	–	–	8	130	–	–	100	–	–	100	–	–
Sarun - -	5	80	–	–	9	120	–	–	5	80	–	–	155	–	–	80	–	–
Tirhoot - -	5	80	–	–	9	101	–	–	5	80	–	–	100	–	–	100	–	–
Sylhet - -	5	80	–	–	9	120	–	–	7	115	–	–	112	11	2	100	–	–
Tipperah - -	5	80	–	–	6	75	–	–	6	100	–	–	110	–	–	100	–	–
Dinagepore -	5	80	–	–	10	135	–	–	6	100	–	–	100	–	–	100	–	–
Bancoorah - -	5	80	–	–	5	65	–	–	5	80	–	–	130	–	–	100	–	–
Beerbhoom -	6	100	–	–	9	121	–	–	6	100	–	–	105	–	–	100	–	–
Rungpore - -	5	80	–	–	11	141	–	–	6	100	–	–	100	–	–	100	–	–
Burdwan - -	6	100	–	–	10	132	–	–	6	100	–	–	120	–	–	100	–	–
Moorshedabad -	8	130	–	–	12	153	–	–	8	130	–	–	100	–	–	125	–	–
Dacca - -	8	130	–	–	12	149	4	6	11	175	–	–	110	–	–	125	–	–
Mymensing -	8	130	–	–	11	135	–	–	11	175	–	–	135	–	–	125	–	–
Hooghly - -	8	130	–	–	9	130	–	–	8	130	–	–	110	–	–	125	–	–
Patna - -	9	145	–	–	11	122	–	–	9	145	–	–	100	–	–	125	–	–
Midnapore - -	11	175	–	–	11	134	–	–	11	175	–	–	100	–	–	125	–	–
24-Pergunnahs -	16	250	–	–	16	275	–	–	16	250	–	–	200	–	–	150	–	–
TOTAL - *Rs.*	193	3,120	–	–	315	4,085	6	6	227	†3,685	–	–	3,902	11	2	‡3,500	–	–

* Number of Officers forming the Establishment.

† Total saving per mensem - - *Rs.* 400 6 6
„ „ „ annum - - „ 4,804 14 –

‡ Total saving per mensem - - *Rs.* 402 11 2
„ „ „ annum - - „ 4,832 6 –

(A. 3.)

STATEMENT showing the STRENGTH and CLASSIFICATION of the VERNACULAR DEPARTMENTS of the revised Magisterial Establishments in *Bengal.*

MAGISTRACIES.	Head Clerk on a Salary of			Second Clerk on a Salary of			Number and Cost of Mohurrirs.	Nazir on a Salary of			Recorder on a Salary of			Total Cost per Mensem.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*		*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
24 Pergunnahs	150	–	–	50	–	–	16 at *Rs.* 250	20	–	–	36	2	–	506	2	–
Dacca	125	–	–	25	–	–	11 „ „ 175	25	–	–	30	–	–	380	–	–
Mymensing	125	–	–	25	–	–	11 „ „ 175	25	–	–	30	–	–	380	–	–
Midnapore	125	–	–	25	–	–	11 „ „ 175	20	–	–	30	–	–	375	–	–
Patna	125	–	–	25	–	–	9 „ „ 145	25	–	–	30	–	–	350	–	–
Moorshedabad	125	–	–	25	–	–	8 „ „ 130	25	–	–	30	–	–	335	–	–
Hooghly	125	–	–	25	–	–	8 „ „ 130	20	–	–	30	–	–	330	–	–
Bancoorah	100	–	–	35	–	–	5 „ „ 80	16	–	–	30	–	–	261	–	–
Berbhoom	100	–	–	30	–	–	6 „ „ 100	20	–	–	30	–	–	280	–	–
Rajshahye	100	–	–	26	–	–	7 „ „ 115	20	–	–	30	–	–	291	–	–
Backergunge	100	–	–	25	–	–	8 „ „ 130	25	–	–	30	–	–	310	–	–
Jessore	100	–	–	25	–	–	8 „ „ 130	12	–	–	30	–	–	297	–	–
Purneah	100	–	–	25	–	–	8 „ „ 130	25	–	–	30	–	–	310	–	–
Sylhet	100	–	–	25	–	–	7 „ „ 115	15	–	–	30	–	–	285	–	–
Tipperah	100	–	–	25	–	–	6 „ „ 100	26	2	–	30	–	–	281	2	–
Dinagepoor	100	–	–	25	–	–	6 „ „ 100	20	–	–	30	–	–	275	–	–
Rungpore	100	–	–	25	–	–	6 „ „ 100	25	–	–	30	–	–	280	–	–
Burdwan	100	–	–	25	–	–	6 „ „ 100	20	–	–	30	–	–	275	–	–
Behar	100	–	–	25	–	–	5 „ „ 80	25	–	–	30	–	–	260	–	–
Tirhoot	100	–	–	25	–	–	5 „ „ 80	25	–	–	30	–	–	260	–	–
Nuddea	100	–	–	25	–	–	4 „ „ 65	20	–	–	30	–	–	240	–	–
Maldah	80	–	–	30	–	–	3 „ „ 50	10	–	–	30	–	–	200	–	–
Furreedpore	80	–	–	25	–	–	8 „ „ 130	25	–	–	30	–	–	290	–	–
Monghyr	80	–	–	25	–	–	6 „ „ 100	20	–	–	30	–	–	255	–	–
Chittagong	80	–	–	25	–	–	6 „ „ 100	25	–	–	30	–	–	260	–	–
Noacolly	80	–	–	25	–	–	5 „ „ 80	10	–	–	30	–	–	225	–	–
Bhaugulpore	80	–	–	25	–	–	5 „ „ 80	20	–	–	30	–	–	235	–	–
Sarun	80	–	–	25	–	–	5 „ „ 80	20	–	–	30	–	–	235	–	–
Bogra	80	–	–	25	–	–	4 „ „ 65	20	–	–	30	–	–	220	–	–
Pubna	80	–	–	25	–	–	4 „ „ 65	15	–	–	30	–	–	215	–	–
Shahabad	80	–	–	25	–	–	4 „ „ 65	20	–	–	31	5	7	221	5	7
Howrah	80	–	–	25	–	–	4 „ „ 65	20	–	–	30	–	–	220	–	–
Cuttack	80	–	–	25	–	–	3 „ „ 50	20	–	–	30	–	–	205	–	–
Balasore	80	–	–	25	–	–	3 „ „ 50	15	–	–	30	–	–	200	–	–
Poree	80	–	–	25	–	–	3 „ „ 50	10	–	–	30	–	–	195	–	–
Chumparum	80	–	–	25	–	–	3 „ „ 50	20	–	–	30	–	–	205	–	–
TOTAL - *Rs.*	3,500	–	–	946	–	–	227 at *Rs.* 3,685	724	2	–	1,087	7		9,942	9	7

(B.)

STATEMENT exhibiting the TOTAL and AVERAGE COST of PRISONERS at different Periods from 1815–16 to 1861–62.

YEARS.	Number of Prisoners.	Cost of Food.			Cost of Clothing.			Other Items.			Total Gross Cost.		
		Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
1815–16 - - - -	17,978	2,68,829	–	–	41,651	–	–	62,852	–	–	3,73,332	–	–
Average per Prisoner -	- -	14	15	3	2	5	1	3	7	11	26	4	10
1825–26 - - - -	14,595	2,14,263	–	–	34,392	–	–	53,387	–	–	3,02,042	–	–
Average per Prisoner -	- -	14	10	11	2	5	8	3	10	6	27	4	10
1835–36 - - - -	14,166	2,55,608	–	–	32,831	–	–	72,763	–	–	3,61,202	–	–
Average per Prisoner -	- -	18	–	8	2	5	1	5	2	2	44	1	8
1844–6 - - - -	23,671	6,02,208	–	–	51,155	–	–	70,458	–	–	7,24,321	–	–
Average per Prisoner -	- -	25	7	5	2	2	7	2	15	7	45	–	8
1855–56 - - - -	19,102	3,91,890	15	7¾	49,045	14	1	97,086	3	1½	5,38,023	–	10¼
Average per Prisoner -	- -	20	8	3				5	1	4	42	10	7
1856–57 - - - -	19,151	4,09,669	8	8	51,281	1	8½	79,087	3	–¾	5,40,037	10	4¼
Average per Prisoner -	- -	21	6	3	2	10	10	4	2	–	43	–	1
1857–58 - - - -	18,880	4,21,557	15	10¼	49,135	12	7	55,124	11	4¼	5,25,818	7	9½
Average per Prisoner -	- -	22	5	3	2	9	8	2	14	8	41	9	7
1858–59 - - - -	20,282	5,00,367	10	9¾	63,330	7	1	77,468	11	9¾	6,41,166	13	8½
Average per Prisoner -	- -	24	10	8	3	2	–	3	13	2	43	9	4
1859–60 - - - -	19,003	4,54,770	4	3	63,033	6	11¼	61,592	15	–¼	5,79,396	10	2½
Average per Prisoner -	- -	23	14	11	3	5	1	3	3	10	41	13	5
1860–61 - - - -	17,907	4,09,656	14	10½	53,254	14	4	53,834	4	9¼	5,16,746	1	11¾
Average per Prisoner -	- -	22	14	–¼	2	15	7	3	–	1½	39	8	–
1861–62 - - - -	17,261	4,50,126	14	–	36,440	1	10	75,057	12	11	5,61,924	12	9
Average per Prisoner -	- -	26	1	9	2	1	8	4	11	1	33	7	10

(C. 1.)

STATEMENT exhibiting the REVENUE DEMANDS, COLLECTIONS, REMISSIONS, and BALANCES for 1861–62.

DIVISIONS.	Current Demand.	Arrear Demand.	Total Demand.	Collections.	Remissions.	Balances.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Bhaugulpore - -	27,65,337	3,19,704	30,85,041	27,07,216	3,015	3,74,810
Burdwan - - -	75,34,925	1,88,725	77,23,650	74,27,743	7,139	2,88,768
Chittagong - - -	23,77,956	3,39,362	27,17,318	23,38,167	5,387	3,73,764
Cuttack - - -	18,02,398	5,31,955	23,34,353	17,90,944	9,866	5,33,543
Dacca - - - -	32,43,446	2,14,803	34,58,249	32,01,922	17,237	2,39,090
Nuddea - - -	41,26,380	3,28,137	44,54,517	40,21,991	86,471	3,46,055
Patna - - - -	79,39,593	9,13,977	88,53,570	79,49,531	32,162	8,71,877
Rajshahye - - -	62,58,552	2,23,617	64,82,169	62,31,576	452	2,50,141
Assam - - - -	10,06,405	54,167	10,60,572	10,07,058	8,635	44,879
Chota Nagpore - -	2,52,676	22,918	2,75,594	2,54,464	1,426	19,704
Darjeeling - - -	47,659	2,866	50,525	40,014	1,294	9,217
TOTAL - - - *Rs.*	3,73,55,327	31,40,231	4,04,95,558	3,69,70,626	1,73,084	33,51,848

(C. 2.)

GRANTS of WASTE LANDS under old Rules which have not been commuted to Freehold under the New Resolution of the Supreme Government.

DISTRICTS.	UP TO END OF 1860-61.				IN 1861-62.				TOTAL.			
	Number of Grants made and Settled.	Area.	Present Jummah.	Eventual Maximum Jummah.	Number of Grants made and Settled.	Area.	Present Jummah.	Eventual Maximum Jummah.	Number of Grants made and Settled.	Area.	Present Jummah.	Eventual Maximum Jummah.
			Rs. a. p.	*Rs. a. p.*			*Rs. a. p.*	*Rs. a. p.*			*Rs. a. p.*	*Rs. a. p.*
Cachar	15	38,031	– –	10,696 2 –	11	14,026	– –	3,920 13 6	26	52,057	– –	14,616 15 6
Durrung	5	1,745	– –	– –	–	– –	– –	– –	5	1,745	—	—
Kamroop	14	13,360	– –	– –	–	– –	– –	– –	14	13,360	—	—
Luckimpore	6	6,363	– –	2,683 – –	4	2,500	– –	1,054 – –	10	8,863	– –	3,737 – –
Nowgong	21	10,505	– –	3,939 6 –	–	– –	– –	– –	21	10,505	– –	3,939 6 –
Seebsaugor	20	13,625	1,864 6 6	4,329 15 11	19	9,943	– –	2,796 9 11	39	23,568	1,864 6 6	7,126 9 10
Soonderbuns	208	10,45,169	42,165 8 5	3,23,664 15 1	14	98,381	555 11 10	30,017 9 –	222	11,43,550	42,720 15 3	3,58,682 8 1
TOTAL	289	1,2 8,798	44,029 9 11	3,45,313 7 –	48	1,24,850	555 11 10	37,789 – 5	337	12,53,648	44,585 5 9	3,83,102 7 5

GRANTS of WASTE LANDS sold outright and commuted to Freehold.

DISTRICT.	UP TO END OF 1860-61.				IN 1861-62.				TOTAL.			
	Number of Grants.	Acres.	Price Realized.	Price remaining to be Realized.	Number of Grants.	Acres.	Price Realized.	Price remaining to be Realized.	Number of Grants.	Acres.	Price Realized.	Price remaining to be Realized.
			Rs. a. p.	*Rs. a. p.*			*Rs. a. p.*	*Rs. a. p.*			*Rs. a. p.*	*Rs. a. p.*
Darjeeling	–	4,331	12,785 7 9	54,270 1 9	–	6,912	6,912 – –	62,425 14 –	–	11,243	19,697 7 9	1,16,695 15 9

(C. 3.)

STATEMENT showing the results of the RESUMPTION and SETTLEMENT of FISHERIES.

DISTRICTS.	In 1861-62.					Up to end of 1861-62.						
	No. of Blocks settled.	Amount of Rent at which settled.	No. of Suits instituted under Regulation II. of 1819.	Decided in favour of Government.	Decided in favour of Individuals.	No of Blocks settled.	Amount of Rent at which settled.	No. of Suits instituted under Regulation II. of 1819.	Decided in favour of Government.	Decided in favour of Individuals.	Struck off.	Pending.
		Rs. a. p.					*Rs. a. p.*					
Monghyr	–	– –	– –	–	–	–	– –	2	–	2	–	–
Burdwan	–	– –	39	–	–	–	– –	39	–	–	–	39
Hooghly	1	177 – –	1	1	–	12	684 – –	3	3	–	–	–
Bullooah	6	830 – –	1	1	–	15	3,198 – –	4	3	1	–	–
Tipperah	–	– –	1	–	4	3	1,201 – –	20	–	19	1	–
Backergunge	–	– –	10	6	–	4	370 – –	72	31	37	–	4
Dacca	3	350 – –	1	29	7	3	350 – –	40	29	7	4	–
Furreedpore	4	1,546 – –	2	5	5	4	1,546 – –	19	5	9	5	–
Mymensing	–	– –	116	–	–	81	3,085 – –	119	2	1	–	116
Sylhet	–	– –	42	10	8	–	– –	105	60	12	–	33
Nuddea	1	53 – –	– –	–	–	10	5,576 – –	11	–	10	1	–
Jessore	10	459 – –	– –	–	–	34	3,902 – –	36	–	2	–	34
24-Pergunnahs	1	72 – –	17	–	–	50	6,589 12 –	91	45	–	25	21
Soonderbuns	43	776 – –	– –	–	–	63	6,644 – –	1	–	–	–	1
Chumparun	42	376 – –	62	52	–	42	376 – –	84	63	–	21	–
Patna	3	960 – –	– –	–	–	6	1,253 – –	—	–	–	–	–
Sarun	1	100 – –	– –	–	–	2	200 – –	—	–	–	–	–
Shahabad	1	750 – –	– –	–	–	2	800 5 –	—	–	–	–	–
Tirhoot	1	125 – –	– –	–	–	3	256 4 –	—	–	–	–	–
Bograh	7	160 – –	– –	–	–	7	160 – –	14	2	–	12	–
Dinagepore	–	– –	5	–	–	2	1,444 – –	12	–	–	–	12
Maldah	12	1,446 – –	– –	–	–	14	1,551 – –	40	16	24	–	–
Moorshedabad	–	– –	– –	–	–	6	685 – –	19	6	12	1	–
Pubna	–	– –	70	26	44	–	– –	70	26	44	–	–
Rajshahye	3	686 – –	38	–	–	38	5,233 – –	52	–	–	–	52
Rungpore	1	1 – –	32	14	11	1	1 – –	32	14	11	7	–
Gowalparah	6	417 12 –	– –	–	–	14	461 – –	—	–	–	–	–
TOTAL	146	9,284 12 –	437	144	79	416	45,563 5 4	885	305	191	77	312

(D 1.)

Statement of Receipts, Charges, and Net Revenue on account of Customs for 1861-62.

1. Ports.	2. Merchandise (Gross Collections.)	3. Salt.	4. Other Accounts, such as Wharf Rents, Fees, Penalties, &c.	5. Total Collections.	6. Deduct Refunds and Drawbacks.	7. Annual Collections.	8. Deduct Charges.	9. Net Revenue.	10. Excess Charges.
Calcutta - -	1,28,82,383	1,49,00,122	60,361	2,78,42,866	3,80,718	2,74,62,148	4,89,771	2,69,72,377	—
Akyab - -	3,59,801	- -	320	3,60,121	5,117	3,55,004	13,008	3,41,996	—
Chittagong - -	52,176	- -	1,002	53,178	- -	53,178	3,685	49,493	—
Balasore - -	2,832	- -	1	2,833	- -	2,833	6,691	- -	3,858
Pooree - -	5,369	- -	- -	5,369	- -	5,369	48	5,321	—
Cuttack - -	10,603	- -	- -	10,603	4,137	6,466	479	5,987	—
Total - -	1,33,13,164	1,49,00,122	61,684	2,82,74,970	3,89,972	2,78,84,998	5,13,682	2,73,75,174	3,858
Deduct Excess Charges - - - - - - - -								3,858	
								2,73,71,316	
Charges of the Board of Revenue and Service Pensions -								48,096	
Net Revenue - - *Rs.*								2,73,23,220	

(D 2.)

Comparative Statement of Receipts, Charges, and Net Revenue on account of Customs for Six Years.

	Receipts on Merchandise.	Receipts on Salt.	Total Receipts.	Deduct Charges.	Net Revenue.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1840-41 - - -	33,09,780	17,13,384	50,23,164	6,49,074	43,74,090
1846-47 - - -	37,82,331	40,03,182	77,85,513	5,44,388	72,41,125
1850-51 - - -	40,48,199	61,39,112	1,01,87,311	5,27,561	9,59.750
1856-57 - - -	53,22,130	92,36,185	1,45,58,315	5,40,828	1,40,17,487
1860-61 - - -	1,35,35,327	91,39,550	2,26,74,877	5,89,461	2,20,85,416
1861-62 - - -	1,32,86,949	1,45,98,049	2,78,84,998	5,61,778	2,73,23,220

(D 3.)

Comparative Statement of the Shipping and Tonnage of the Port of *Calcutta*.

Arrivals.

Colours, &c.	1840–41.		1846–47.		1850–51.		1856–57.		1860–61.		1861–62.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
British - -	537	2,01,019	504	2,16,820	587	2,58,224	478	3,03,317	514	3,84,708	496	3,98,691
American -	22	8,479	28	12,031	48	23,210	152	1,27,378	126	1,09,920	145	1,27,293
Arab - -	14	6,405	18	7,290	25	11,436	14	8,552	13	6,123	18	9,795
Belgian - -	–	–	–	–	–	–	4	2,230	–	–	1	356
Bremen - -	–	–	–	–	–	–	6	2,544	1	620	–	–
Danish - -	–	–	3	859	3	1,158	–	–	–	–	1	272
Dutch - -	8	1,906	1	165	3	1,313	4	2,679	–	–	1	265
French - -	38	11,789	51	16,627	59	20,230	145	63,835	89	41,431	125	58,569
German - -	–	–	–	–	–	–	–	–	1	425	–	–
Hamburgian -	–	–	–	–	3	1,170	11	2,993	7	2,084	2	611
Hanoverian -	–	–	–	–	–	–	–	–	–	–	1	146
Norwegian -	–	–	–	–	–	–	2	636	–	–	–	–
Prussian - -	–	–	–	–	–	–	3	2,902	1	991	1	894
Russian - -	–	–	–	–	–	–	–	–	2	1,195	2	1,680
Sardinian -	1	276	–	–	–	–	1	310	1	484	–	–
Spanish - -	1	280	–	–	1	405	–	–	–	–	–	–
Swedish - -	–	–	–	–	5	1,028	2	1,051	3	1,214	3	1,053
Turkish - -	–	–	–	–	–	–	–	–	1	544	1	377
Steamer - -	–	–	–	–	33	23,118	60	38,250	86	63,177	89	76,357
Native Craft -	65	5,464	391	20,842	266	15,210	129	15,450	102	12,081	93	12,089½
Total -	686	2,35,618	996	2,74,634	1,033	3,56,502	1,011	5,72,127	947	6,24,997	979	6,88,448½

Departures.

Colours, &c.	1840–41.		1846–47.		1850–51.		1856–57.		1860–61.		1861–62.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
British - -	532	1,97,122	542	2,34,797	578	2,55,129	620	3,88,899	500	3,69,488	522	4,04,412
American -	22	7,712	22	9,535	47	23,872	206	1,66,591	124	1,09,080	137	1,15,860
Arab - -	11	4,791	11	5,404	23	10,600	6	3,700	1	343	10	4,920
Belgian - -	–	–	–	–	–	–	1	521	–	–	1	386
Bremen - -	–	–	–	–	–	–	8	3,513	–	–	1	621
Chinese - -	1	400	–	–	–	–	–	–	–	–	–	–
Danish - -	–	–	2	278	3	1,001	1	592	1	1,239	2	457
Dutch - -	9	2,282	1	165	4	1,498	5	3,681	–	–	–	–
French - -	48	15,253	55	18,566	63	24,825	81	36,057	81	36,630	126	60,648
Hamburgian -	–	–	–	–	1	388	11	4,435	5	1,487	4	1,188
Hanoverian -	–	–	–	–	–	–	–	–	–	–	1	148
Norwegian -	–	–	–	–	–	–	1	566	–	–	–	–
Prussian - -	–	–	–	–	–	–	1	711	1	894	2	1,885
Russian - -	–	–	–	–	1	356	–	–	2	1,256	2	1,494
Sardinian -	1	276	–	–	–	–	1	154	4	1,319	1	294
Spanish - -	–	–	–	–	1	800	–	–	–	–	–	–
Swedish - -	–	–	–	–	5	1,682	4	1,579	1	716	2	921
Turkish - -	–	–	–	–	–	–	–	–	1	544	2	754
Steamer - -	–	–	–	–	38	22,794	66	41,862	81	55,879	88	65,839
Native craft -	65	5,464	391	20,842	266	15,210	101	13,555	106	12,574	97	12,225
Total -	689	2,33,300	1,024	2,89,587	1,030	3,58,155	1,113	6,66,416	908	5,91,449	998	6,72,049

(E.)

Comparative Statement of Sales of Government and Private Salt: and of Receipts, Expenditure, and Net Revenue under the head of Salt.

May to April.	GOVERNMENT SALT.							SEA-IMPORTED SALT.	
	FULL TAXED.				Retail and Local Sales at Full and Reduced Prices.		Total Proceeds of Government Sales.		
	Quantity.	Cost.	Duty.	Total Proceeds.	Quantity.	Proceeds.		Quantity.	Gross Customs Duty.
	Mds.	*Rs.*	*Rs.*	*Rs.*	*Mds.*	*Rs.*	*Rs.*	*Mds.*	*Rs.*
1840–41 -	40,72,534	37,75,383	1,32,35,734	1,70,11,117	8,26,687	23,36,531	1,93,47,648	5,73,998	17,13,384
1850–51 -	28,25,101	20,95,136	70,48,069	91,43,205	8,50,140	17,21,745	1,08,64,950	26,01,034	61,39,113
1860–61 -	45,58,540	31,58,913	1,38,87,142	1,70,46,054	10,13,697	25,44,988	1,95,91,041	30,59,759	91,39,550
1861–62 -	7,63,697	6,18,514	24,78,388	30,96,902	8,67,151	24,92,235	55,89,137	45,92,705	1,49,00,122

May to April.	EXCISE SALT.		Miscellaneous Receipts in Salt Department.	GROSS AGGREGATE RESULTS.		Deduct Charges in Salt Department.	Balance.	Deduct Proportion of Customs Charges debitable to the Customs Duty Levied on Salt.	Net Balance.
	Quantity.	Duty.		Total Quantity Sold.	Total Receipts.				
	Mds.	*Rs.*	*Rs.*	*Mds.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1840–41 -	- -	- -	62,181	54,72,719	2,11,23,214	47,39,287	1,63,83,926	2,21,396	1,61,62,530
1850–51 -	35,000	87,500	1,05,515	63,11,274	1,71,97,077	33,39,447	1,38,57,630	3,17,920	1,35,39,710
1860–61 -	29,000	88,000	1,01,113	66,60,996	2,89,19,704	43,63,637	2,45,56,067	2,54,177	2,43,01,890
1861–62 -	25,250	82,062	1,90,747	62,48,803	2,07,62,068	48,30,998	1,59,22,070	2,02,101	1,56,59,969

(F 1.)

Statement of Receipts, Charges, and Net Revenue derived from Opium for Seven Years.

YEARS.	Receipts.	Charges.	Net Revenue.
1845–46 - - - - - - - - - -	2,96,15,532	75,54,339	2,20,61,193
1846–47 - - - - - - - - - -	3,06,90,110	79,05,212	2,27,84,898
1855–56 - - - - - - - - - -	4,17,45,392	1,27,63,177	2,89,82,215
1856–57 - - - - - - - - - -	3,82,34,910	1,12,07,266	2,70,27,644
1859–60 - - - - - - - - - -	4,31,35,690	67,73,414	3,63,62,276
1860–61 - - - - - - - - -	4,19,87,802	88,11,749	3,31,76,053
1861–62 - - - - - - - - - -	3,91,89,108	1,45,04,892	2,46,84,216

(F 2.)

STATEMENT exhibiting the SALE PRICE of ABKAREE OPIUM.

DIVISION.	DISTRICT.	Price per Seer.
PATNA	Behar	16
	Patna	16
	Sarun	16
	Shahabad	16
	Tirhoot	16
BHAUGULPORE	Bhaugulpore	16
	Monghyr	16
	Purneah	16
RAJSHAHYE	Dinagepore	18
	Rungpore	18
	Bograh	20
	Maldah	20
	Rajshahye	22
	Pubna	22
	Moorshedabad	22
DACCA	Mymensing	20
	Sylhet	20
	Cachar	20
	Dacca	20
	Backergunge	20
	Furreedpore	20
CHITTAGONG	Bullooah	20
	Tipperah	20
	Chittagong	20
NUDDEA	Nuddea	22
	Jessore	22
	24-Pergunnahs	22
	Calcutta	22
BURDWAN	Bancoorah	22
	Beerbhoom	22
	Burdwan	22
	Hooghly	22
	Midnapore	22
CUTTACK	Balasore	22
	Cuttack	22
	Pooree	22
	Sumbulpore	22
CHOTA NAGPORE	Lohardugga	16
	Hazareebaugh	16
	Maunbhoom	16
	Singbhoom	16
ASSAM	All Districts	14
	Darjeeling	16

(G 1.)

STATEMENT of DEMANDS, COLLECTIONS, BALANCES, and CHARGES of Abkaree Revenue, for the Year 1861-6

1.	2.	COLLECTIONS.			6.	CHARGES.			10.	11.
		3.	4.	5.		7.	8.	9.		
DIVISION.	Demands.	Spirits and Drugs.	Opium Sale Proceeds.	TOTAL.	Balances, being difference between Columns 3 and 4.	General.	Cost of Opium at 5-8 per seer.	TOTAL.	Per-centage of Charges on Collections.	Net Revenue
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a.
Bhaugulpore	4,23,995 1 6	4,11,413 2 9	34,751 – –	4,46,164 2 9	12,581 14 9	26,427 10 8	16,361 2 –	42,788 12 8	6 6 8	4,03,375 6
Burdwan	3,09,505 – –	3,06,167 – –	2,08,466 – –	5,14,633 – –	3,338 – –	36,091 – –	57,328 – –	93,419 – –	11 – –	4,21,214 –
Chittagong	68,174 12 –	66,959 8 –	44,165 – –	1,11,124 8 –	1,215 4 –	13,345 3 4	13,499 12 –	26,839 15 4	14 – –	84,284 8
Cuttack	76,769 1 1	71,016 1 2¾	1,30,917 – –	2,01,933 1 2¾	5,752 15 10¼	11,451 15 6	37,351 14 –	48,803 13 6	16 2 –	1,53,129 3
Dacca	3,45,159 1 5½	3,20,332 11 8¼	1,43,102 4 –	4,63,434 15 8½	24,826 5 9	34,199 8 1½	43,725 11 –	77,925 3 1½	10 11 5	3,85,509 12
Nuddea	9,74,935 1 6	9,66,862 13 6	3,30,935 – –	12,97,797 13 6	8,072 4 –	63,236 11 4	91,007 2 –	1,54,243 13 4	6 8 7	11,43,554 –
Patna	10,77,640 13 6	10,37,564 7 3	1,937 8 –	10,39,501 15 3	40,076 6 3	21,130 7 11	1,065 10 –	22,196 1 11	2 – 7	10,17,305 13
Rajshahye	3,04,744 9 8	3,03,854 13 8	2,36,724 12 –	5,40,579 9 8	889 12 –	42,984 5 9	75,995 14 6	1,18,980 4 3	14 2 3	4,21,599 5
Assam	12,861 8 7	12,744 2 7	7,79,926 – –	7,92,670 2 7	117 6 –	1,213 15 –	3,06,299 8 –	3,07,513 7 –	9 8 –	4,85,156 11
Chota Nagpore	1,68,407 3 11	1,67,120 10 –	11,200 – –	1,78,320 10 –	1,286 9 11	12,271 8 7	4,100 4 –	16,371 12 7	7 5 5	1,61,948 13
Darjeeling	5,590 2 –	5,550 2 –	– – –	5,550 2 –	40 – –	– – –	– – –	– – –	– –	5,550 2
TOTAL	37,67,782 7 2½	36,69,585 8 8¼	19,22,124 8 –	55,91,710 – 8¼	98,196 14 6¼	2,62,352 6 2½	6,46,729 13 6	9,09,082 3 8½	7 2 5	46,82,627 12

(G 2.)

COMPARATIVE STATEMENT of the Sales of RUM and COUNTRY SPIRITS during the four Quarters of 1861-62.

PERIOD.	Number of Gallons consumed.			Revenue levied in shape of Duty and Licence Fees.		
	Rum.	Country Spirits.	TOTAL.	Rum.	Country Spirits.	TOTAL.
1861-62.						
1st Quarter	19,717	35,883	55,600	44,367	44,854	89,221
2d Ditto	21,547	38,169	59,716	48,481	47,711	96,192
3d Ditto	27,867	32,997	60,864	62,701	42,866	1,05,567
4th Ditto	33,413	9,172	42,585	75,180	20,637	95,817
TOTAL	1,02,544	1,16,221	2,18,765	2,30,729	1,56,068	3,86,797

(H.)

Statement of Gross Collections from Stamps for the Years 1846-47, 1856-57, 1860-1861, and 1861-62.

	Amount Sale of Stamps in the Year 1846-47.	Amount Sale of Stamps in the Year 1856-57.	Amount Sale of Stamps in the Year 1860-61.	Amount Sale of Stamps in the Year 1861-62.	Increase in 1861-62, comparing with the Year 1846-47.	Decrease in 1861-62, comparing with the Year 1846-47.	Increase in 1861-62, comparing with the Year 1856-57.	Decrease in 1861-62, comparing with the Year 1856-57.	Increase in 1861-62, comparing with the Year 1860-61.	Decrease in 1861-62, comparing with the Year 1860-61.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Calcutta - -	15,683 14 –	1,11,637 – –	7,54,107 7 6	9,87,765 4 –	9,72,081 6 –	- - - - -	8,43,128 4 –	- - - - -	2,33,657 12 6	—
Bengal - - -	21,13,295 2 –	22,91,868 – –	38,63,003 5 6	55,27,531 8 6	34,15,449 6 6	1,213 – –	32,40,716 10 6	5,053 2 –	17,03,155 8 –	38,627 5 –
North Western Provinces.	12,72,168 8 –	15,25,654 12 –	20,96,319 4 –	25,63,166 – 6	12,90,997 8 6	- - - - -	10,39,029 15 6	1,518 11 –	5,32,984 7 –	66,137 10 6
Punjab - - -	92,207 5 –	5,04,258 13 –	6,27,443 2 6	9,58,113 7 6	8,65,906 2 6	- - - - -	4,66,124 14 6	12,270 4 –	3,33,961 11 –	3,291 6 –
Central Provinces -	- - -	38,618 2 –	68,221 12 6	1,16,572 4 6	1,16,572 4 6	- - - - -	77,953 8 6	- - - - -	48,350 8 –	—
Berar - - -	- - -	- - -	14,759 1 –	24,328 9 6	24,328 9 6	- - - - -	24,328 9 6	- - - - -	17,007 7 6	7,437 15 –
Oude - - -	- - -	1,41,700 11 –	1,91,739 10 6	2,75,704 2 6	2,75,704 2 6	- - - - -	1,41,013 13 6	7,010 6 –	83,964 8 –	—
British Burmah -	- - -	- - -	38,310 13 6	1,47,302 8 6	1,47,302 8 6	- - - - -	1,47,302 8 6	- - - - -	1,10,176 8 6	1,184 13 6
Total - - Rs.	34,03,354 13 –	46,46,738 – –	76,53,904 9 –	1,06,00,483 13 6	71,08,342 – 6	1,213 – –	59,79,598 4 6	25,852 7 –	30,63,258 6 6	1,16,679 2 –
				Deduct decrease -	1,213 – –	Deduct decrease -	25,852 7 –	Deduct decrease -	1,16,679 2 –	
				Net increase in 1861-62, compared with 1846-47	71,07,129 – 6	Net increase in 1861-62, compared with 1856-57	59,53,743 13 –	Net increase in 1861-62, compared with 1860-61	29,46,579 4 6	

(I 1.)

STATEMENT of Income Tax Assessments and Collections in the Mofussil Districts on account of the Year 1861-62 (August to July.)

Divisions.	DISTRICTS.	Estimated Demand for the year (August to July.)		Number of Notices Issued.	Number of Returns Received.	Amount Assessed.	Remaining to be Assessed.	Amount Collected.	Remaining to be Collected.	Total Number of Surcharges.	Amount Surcharged.	Number Resisted Successfully.	Number Resisted Unsuccessfully.	Number not Contested.	Pending.
		Rs.				Rs.	Rs.	Rs.	Rs.		Rs.				
Bhaugulpore.	Bhaugulpore	1,05,987	From May 1861 to April 1862.	9	9	1,05,987	-	43,004	62,982	1	32	1	—	—	—
	Purneah	1,25,000		15	13	1,19,809	5,190	38,056	86,943	3	4,337	-	2	1	—
	Monghyr	1,13,000		43	37	1,03,971	9,028	35,241	77,758	165	4,803	4	8	24	129
	Sonthal Pergunnahs:														
	Rajmehal	5,550		54	32	5,006	543	381	5,168	53	905	2	8	31	12
	Godda	8,000		3	3	1,372	6,627	1,371	6,628	150	1,500	-	-	-	150
	Pakour	5,200		84	74	5,190	10	1,428	3,771	2	167	-	-	-	2
	Nya Doomka	9,256		84	84	9,256	-	3,154	6,101	25	110	-	-	25	—
	Deoghur	8,071		296	318	8,071	-	7,678	393	101	1,471	-	-	101	—
	Total	3,80,064		588	570	3,58,664	21,400	1,30,314	2,49,749	500	14,327	7	18	182	293
Burdwan.	Bancoorah	38,000		658	615	28,419	9.581	12,798	25,202	230	8,103	8	88	67	67
	Beerbhoom	56,164		481	462	53,148	3,016	20,378	35,786	527	8,045	284	79	116	48
	Burdwan	1,57,000		260	190	1,33,688	23,312	64,311	92,689	177	4,220	24	65	69	19
	Hooghly	1,96,063		1,112	1,111	1,85,240	10,823	75,061	1,21,002	427	6,497	10	48	369	1
	Midnapore	1,70,000		2,736	2,829	1,56,536	13,464	50,423	1,19,577	1,923	59,164	444	261	481	737
	Total	6,17,227		5,247	5,207	5,57,031	60,196	2,22,971	3,94,256	3,284	86,029	770	541	1,102	871
Chittagong.	Bullooah	62,394		1,681	1,045	47,543	14,851	16,754	45,640	120	561	28	22	41	29
	Chittagong	43,025		404	403	43,025	-	20,174	22,851	577	8,548	44	59	454	20
	Tipperah	72,167		748	605	71,672	495	38,732	33,435	423	21,665	25	142	243	13
	Total	1,77,586		2,833	2,053	1,62,240	15,346	75,660	1,01,926	1,120	30,774	97	223	738	62
Cuttack.	Balasore	33,685		272	222	19,874	13,811	12,234	21,451	201	14,876	14	82	5	100
	Cuttack	94,304		64	64	82,770	11,534	17,463	76,841	1,620	38,723	106	168	132	1,214
	Pooree	1,12,361		2,590	2,511	1,00,895	11,466	18,104	94,256	1,945	38,688	621	253	1,071	—
	Sumbulpore	2,500		1,705	1,189	1,756	743	1,589	910	206	1,362	17	37	152	—
	Total	2,42,851		4,631	3,986	2,05,297	37,554	49,392	1,93,459	3,972	90,650	758	540	1,360	1,314
Dacca.	Backergunge	1,25,000		69	425	1,24,369	630	51,520	73,479	70	296	-	-	-	70
	Cachar	15,000		908	858	14,070	929	6,426	8,573	254	3,852	7	17	210	20
	Dacca - Rs. 1,02,000 Lump assessment for the City of Dacca „ 65,000	1,67,000		689	328	1,64,736	2,263	61,037	1,05,962	42	3,303	1	36	2	3
	Furreedpore	47,270		216	311	36,340	10,929	16,046	31,224	109	28,361	18	27	52	12
	Mymensing	1,85,000		13,556	13,960	1,85,000	-	37,940	1,47,059	110	3,401	-	-	110	—
	Sylhet	40,903		622	512	40,903	-	10,695	30,207	—	—	—	—	—	—
	Total	5,80,174		16,060	16,394	5,65,421	14,752	1,83,668	3,96,505	585	39,214	26	80	374	105

NUDDEA.	Jessore	1,01,311	From May 1861 to April 1862.	586	357	99,310	2,001	23,261	78,050	45	1,674	—	4	18	23
	Nuddea	1,42,000		674	557	10,354	1,31,645	10,351	1,31,648	—	—	—	—	—	—
	24-Pergunnahs	2,48,406		7,767	7,344	34,817	2,13,589	42,836	2,05,570	5,517	31,410	256	609	4,275	377
	TOTAL	4,91,718		9,027	8,258	1,44,481	3,47,236	76,449	4,15,268	5,562	33,085	256	613	4,293	400
PATNA.	Behar	1,90,947		331	267	1,69,954	20,993	31,120	1,59,827	—	—	—	—	—	—
	Chumparun	1,07,500		594	542	72,443	35,056	37,057	70,412	148	6,836	2	10	133	3
	Patna	1,47,604		208	313	1,17,442	30,162	50,173	97,431	32	1,070	2	8	13	9
	Sarun	1,29,211		1,525	803	6,832	1,22,378	33,370	95,841	—	—	—	—	—	—
	Shahabad	1,20,000		5,282	2,810	21,693	98,306	15,657	1,04,342	203	3,162	—	3	22	178
	Tirhoot	3,35,000		1,056	1,343	3,28,966	6,033	1,08,520	2,26,479	154	3,012	2	5	15	132
	TOTAL	10,30,264		8,996	6,078	7,17,333	3,12,930	2,75,899	7,54,365	537	14,080	6	26	183	322
RAJSHAHYE.	Bograh	48,000		264	693	39,547	8,452	4,341	43,658	24	416	—	2	22	—
	Dinagepore	1,65,000		1,739	864	27,863	1,37,136	271	1,64,728	50	13,310	—	—	—	50
	Maldah	40,000		1,286	776	6,579	33,420	763	39,236	392	2,776	—	—	349	43
	Moorshedabad	1,52,287		518	454	1,35,896	16,391	23,779	1,28,503	98	630	20	13	3	62
	Pubna	64,454		12	143	43,789	20,665	8,968	55,486	15	489	—	—	15	—
	Rajshahye	84,616		360	128	83,920	696	46,420	38,195	—	—	—	—	—	—
	Rungpore	1,30,000		3,945	3,570	6,576	1,23,423	4,932	1,25,067	241	2,256	1	2	44	194
	TOTAL	6,84,359		8,124	6,628	3,44,172	3,40,186	89,478	5,94,881	820	19,878	21	17	433	349
ASSAM.	Durrung	3,568		261	261	3,568	-	2,222	1,315	4	53	—	1	3	—
	Gowalparah	22,500		1,216	556	19,618	2,881	14,197	8,302	543	4,155	5	5	533	—
	Kamroop	32,000		770	720	22,480	9,520	8,421	23,579	695	18,840	—	—	—	695
	Luckimpore	11,142		759	668	11,142	- -	6,406	4,735	423	4,272	9	17	397	—
	Nowgong	8,994		872	668	8,994	- -	8,498	496	668	6,921	—	98	570	—
	Seebsagur	9,510		620	559	9,478	32	6,990	2,520	444	5,062	5	—	439	—
	Cossyah Hills	17,248		467	104	9,337	7,910	13,391	3,856	—	—	—	—	—	—
	TOTAL	1,04,964		4,965	3,536	84,620	2,344	60,128	44,836	2,777	39,304	19	121	1,942	695
CHOTA NAGPORE.	Hazareebaugh	53,000		5,965	2,373	12,601	40,398	3,031	49,968	1,482	9,937	9	36	1,401	36
	Lohardugga	70,000		2	2	63,889	6,110	8,315	61,684	4,768	35,245	—	—	4,610	158
	Maunbhoom	48,852		521	409	48,852	- -	18,826	30,026	225	3,646	4	12	207	2
	Singbhoom	10,960		731	731	10,960	- -	4,695	6,264	—	—	—	—	—	—
	TOTAL	1,82,812		7,219	3,515	1,36,303	46,509	34,868	1,47,943	6,475	48,828	13	48	6,218	196
	Darjeeling	6,873		One general Notice.	- -	6,850	23	301	6,572	—	—	—	—	—	
	GRAND TOTAL	44,98,897		67,690	56,225	32,82,416	12,16,480	11,99,132	32,99,764	25,632	4,16,173	1,973	2,227	16,825	4,607

(I 2.)

STATEMENT showing Progress in Assessment and Collection of Income Tax, in Calcutta and its Suburbs, up to 30th April 1862.

DIVISION.	Number of Assessments made for the year 1860-61, up to 30th April 1862.	Amount of Assessments made for the year 1860-61, up to 30th April 1862.			Number of Assessments revised for the year 1861-62, under Act XXI. of 1861.	Results of Revision under Act XXI. of 1861.			Number of fresh Assessments made for 1861-62.	Amount of fresh Assessments made for 1861-62.			Number of Surcharges made for 1860-61, up to 30th April 1862.	Number of Surcharges made on fresh Assessments of 1861-62.	Total Amount of Assessments remitted on Appeal to the Commission from the Assessments of 1860-61.			Total Amount of Collection for 1860-61, up to 30th April 1862.			Total Amount of Collection for 1861-62, up to 30th April 1862.			Total Amount of Refund made for 1860-61, up to 30th April 1862.			Total Amount of Refund made for 1861-62, up to 30th April 1862.		
		Rs.	a.	p.		Rs.	a.	p.		Rs.	a.	p.			Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1st Division - - - -	3,049	1,13,221	12	-	98	2,974	9	11	67	2,458	8	3	1,941	58	18,498	3	-	1,00,662	3	3	3,4034	14	-	13,517	-	4	7	15	-
2nd Division - - - -	8,316	2,88,483	1	-	162	6,981	5	-	84	1,949	5	-	7,206	41	25,830	4	3	2,46,845	12	3	47,049	6	-	16,589	9	6	10	10	6
Special Assessor - - - -	31	2,08,494	13	7	-	-	-	-	-	-	-	-	-	-	66,619	-	9	1,42,063	5	4	40,934	15	6	158	3	-	—		
3d Division - - - -	6,743	7,26,721	12	-	133	22,618	14	-	242	6,910	6	-	5,067	14	1,25,012	11	1	5,93,200	9	-	1,63,417	8	6	49,160	4	5	604	-	-
4th Division - - - -	3,794	1,17,725	13	-	80	2,100	12	-	17	845	15	-	2,676	7	6,137	10	1	92,219	11	7	13,036	7	6	1,823	1	-	192	10	-
Suburbs, North Division - -	3,829	69,102	9	-	174	1,375	13	-	375	5,236	9	6	3,387	364	5,605	14	-	53,297	5	9	6,341	12	6	2,948	15	6	—		
Ditto, South Division - - -	8,859	1,08,066	1	8	98	1,632	6	-	188	7,863	1	-	6,357	139	12,129	5	3	58,904	14	6	2,321	4	6	4,143	14	3	—		
Howrah Division - - -	2,853	71,663	8	8	149	429	11	-	287	5,897	1	-	937	144	12,631	3	3	44,606	12	10	4,192	1	3	2,311	5	7	—		
Special Commissioner - - -	-	2,41,676	2	-	-	-	-	-	-	-	-	-	-	-	10,175	13	6	2,34,498	8	6	88,970	5	-	2,720	-	-	—		
TOTAL - - -	37,474	19,45,155	8	11	895	38,113	6	11	1,260	31,160	13	9	27,571	767	2,82,640	1	2	15,66,299	3	-	4,00,298	10	9	93,372	5	7	815	3	6

(J.)

GENERAL STATEMENT of the Revenue and Expenditure of the Lower Provinces, for the Years 1859–60, 1860–61, and 1861-62.

HEADS OF SERVICE.	1859-60.	1860-61.	1861-62.
REVENUE:	*Rupees.*	*Rupees.*	*Rupees.*
I.—1. Land Revenue	3,75,89,700	3,86,26,900	4,13,07,000
2. Sayer and Miscellaneous	3,47,400	4,50,300	3,80,000
3. Excise	40,42,600	44,40,600	56,78,900
II.—Assessed Taxes	- -	18,77,800	63,75,700
III.—Customs Imports	1,18,43,200	1,06,08,800	94,72,100
Exports	21,70,900	34,53,200	38,42,000
Salt imported	68,27,600	91,39,500	1,50,20,500
IV.—Salt	1,30,53,400	1,97,77,900	58,57,200
V.—Opium	4,31,14,800	4,19,98,500	3,91,70,900
VI.—Stamps	30,57,700	47,53,300	66,84,300
VII.—Post Office	—	—	—
VIII.—Electric Telegraph	—	—	—
IX.—Law and Justice	8,69,000	10,81,500	13,64,900
X.—Police	1,06,800	1,12,700	2,61,500
XI.—Mint	—	—	—
XII.—Marine	6,14,200	17,61,100	10,12,800
XIII.—Public Works	13,93,300	16,58,700	18,28,800
XIV.—Tributes	—	—	—
XV.—Miscellaneous	7,75,600	7,97,700	8,54,500
XVI.—Public Debt, Local Funds	18,48,500	21,60,100	22,12,400
TOTAL Revenue - - - *Rs.*	12,76,54,700	14,26,98,600	14,13,23,500
EXPENDITURE:			
A.—Allowances, Refunds, and Drawback	3,83,600	7,72,300	13,49,100
B. I.—1. Land Revenue Excise Survey	32,50,600	32,17,200	32,82,300
2. Assessed Taxes	- -	2,37,600	5,96,700
3. Customs	5,26,900	5,86,400	6,11,600
4. Salt	33,86,300	43,20,400	48,40,000
5. Opium	65,84,200	88,12,200	1,37,95,600
6. Stamps	1,68,500	2,83,500	2,43,100
7. Post Office	—	—	—
8. Electric Telegraph	—	—	—
9. Superannuation Pensions	1,04,600	1,28,000	1,10,400
10. Miscellaneous	- -	3,15,200	17,100
11. Contingencies, Special and Temporary	- -	- -	39,000
B. II.—Allowances and Assignments under Treaties and Engagements	16,40,000	18,78,000	17,19,700
III.—Allowances to District and Village Officers	—	—	—
IV.—Miscellaneous	- -	23,200	43,800
C.—Army	—	—	—
D.—Navy	—	—	—
E.—Works of Internal Improvement, &c.	7,15,700	10,78,700	9,39,800
F. I.—Public Works	46,14,900	52,13,600	53,36,000
II.—Salaries and Expenses of Public Departments	12,75,600	14,25,800	14,45,000
III.—Law and Justice	51,73,800	54,19,600	53,23,600
IV.—Police	38,20,700	36,94,400	39,74,000
V.—Education	10,74,400	11,35,800	11,21,000
VI.—Political Agencies, &c.	—	—	—
VII.—Superannuation and Retired Allowances	4,76,900	15,69,700	4,83,000
VIII.—Marine	45.27,600	44,13,500	8,80,400
IX.—Miscellaneous	1,00,900	72,600	1,29,100
X.—Civil Contingencies	2,01,700	11,500	3,65,900
G.—Public Debt, Local Funds	11,44,700	14,14,600	23,87,900
TOTAL Expenditure - - *Rs.*	3,91,71,600	4,60,23,800	4,90,34,100
Surplus - - - - - - *Rs.*	8,84,83,100	9,66,74,800	9,22,89,400

Chap IX.
Bengal.

(K. 1.)

Statement exhibiting the results of the University Entrance Examination.

From	December 1860.				December 1861.			
	No. of Candidates.	No. Passed.			No. of Candidates.	No. Passed.		
		1st Division.	2d Division.	Total.		1st Division.	2d Division.	Total.
Government Institutions - - -	455	34	210	244	547	41	231	272
Aided Institutions - - - -	114	3	48	51	152	5	46	51
Independent Institutions - - -	136	4	75	79	185	13	62	75
Private Students - - - - -	28	3	7	10	51	2	10	12
Schoolmasters - - - - -	26	6	9	15	36	10	16	26
Total - -	759	50	349	399	971	71	365	436

(K. 2.)

Statement of affiliated Institutions in which the Junior Scholarships have been made tenable.

Affiliated Institutions.	Monthly fee payable. Rs.	a.	p.	No. of Scholarships.
Presidency College - - - - - - -	5	-	-	52
Sanscrit College - - - - - - -	1	-	-	2
Medical College - - - - - - -	5	-	-	17
Civil Engineering College - - - - - -	5	-	-	6
Doveton College - - - - - - -	12	-	-	6
St. Paul's School - - - - - - -	10	-	-	1
Free Church Institution - - - - - -	-		-	7
Houghly College - - - - - - -	4	-	-	12
Krishnaghur College - - - - - - -	4	-	-	12
Berhampore College - - - - - - -	3	8	-	11
Dacca College - - - - - - -	3	8	-	29

(K. 3.)

Classification of the Students of the Presidency College according to the social position of their parents.

Where Resident.	Social position of the Parents.									
	Zemindars, Talookdars, and persons of independent income.		Merchants, Bankers, Banians, and Brokers.		Professional persons.		Government servants and pensioners.		Others.	
	Number of Students.	Per-centage.	Number of Students.	Per-centage.	Number of Students.	Per-centage.	Number of Students.	Per-centage.	Number of Students.	Per-centage.
Calcutta - - -	27	12·16	18	8·11	8	3·60	14	6·30	29	13·06
Mofussil - - -	51	22·97	8	3·60	22	9·92	18	8·11	27	12·16
Total - -	78	35·13	26	11·71	30	13·52	32	14·41	56	25·22

(K. 4.)

Classification of all Students in Government Schools according to the social position of their parents.

Schools.	Zemindars.	Government Servants.	Others.	Total.
English Schools (Government) - - - - - - -	712	2,059	1,216	3,987
English Schools (Aided) - - - - - - -	1,477	1,688	5,892	9,057
Vernacular Schools (Government) - - - - - -	804	1,588	7,331	9,723
Vernacular Schools (Aided) - - - - - - -	1,194	1,357	5,590	8,141
Vernacular Schools of other Classes - - - - -	780	903	4,304	5,987
Total - -	4,967	7,595	24,333	36,895

(L.)

Public Works Department.

General Abstract of Expenditure during the Year 1861-62.

Disbursing Department.	Direction.	Military.			Civil Administration.						Public Improvements.						Grand Total.	Total Expenditure.	Paid from Government Treasuries.
		Army.	Navy.	Total.	Revenue.	General.	Ecclesiastical.	Educational.	Judicial.	Total.	Municipal.	Marine.	Agricultural.	Communication.	Electric Telegraph.	Total.			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal Government	3,448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,448	3,448	3,448
Chief engineer	59,143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59,143	-	59,143
Controller and examiner	12,1,211	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,21,211	2,17,960	1,21,211
Superintending engineer, 1st circle	37,606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37,606	—	—
Presidency Division:																			
Original works	-	10,514	56,247	66,761	54,850	1,22,948	2,977	869	19,827	2,01,471	-	-	-	565	-	565	2,68,797	4,69,239	4,73,158
Repairs	-	21,436	19,150	40,586	51,967	27,690	764	10,409	33,104	1,23,934	-	-	-	-	-	-	1,64,520		
Establishment and contingencies	-	2,720	6,420	9,140	8,123	12,826	319	961	4,505	26,734	-	-	-	48	-	48	35,922		
Garrison Engineer:																			
Original works	-	39,497	-	39,497	-	122	3,036	-	-	3,158	-	-	-	-	-	-	42,655	1,55,843	1,20,356
Repairs	-	80,665	-	80,665	-	48	600	-	-	648	-	-	-	-	-	-	81,313		
Establishment and contingencies	-	30,885	-	30,885	-	44	946	-	-	990	-	-	-	-	-	-	31,875		
Iron Bridge Yard:																			
Original works	-	-	-	-	-	168	-	-	-	168	-	-	-	-	-	-	168	168	1,08,000
Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Establishment and contingencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Suburban Road:																			
Original works	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-	78	78	1,14,127	1,05,000
Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	97,631	-	97,631	97,631		
Establishment and contingencies	-	-	-	-	-	-	-	-	-	-	-	-	-	16,418	-	16,418	16,418		
Barrackpore:																			
Original works	-	45,957	-	45,957	685	6,801	425	364	5,840	14,115	-	-	-	-	-	-	60,007	2,47,011	2,65,439
Repairs	-	76,063	-	76,063	1,345	6,912	2,348	4,509	4,152	19,266	-	-	-	58,016	-	58,016	1,53,345		
Establishment and contingencies	-	19,204	-	19,204	319	2,161	436	767	1,570	5,253	-	-	-	9,137	-	9,137	33,594		
Arracan:																			
Original works	-	4,554	5,888	10,442	12,417	464	-	-	14,027	26,908	-	-	-	58	11,330	11,388	48,738	85,643	89,500
Repairs	-	4,262	-	4,262	4,110	2,615	1,004	1,345	7,021	16,095	-	2,345	-	1,411	-	3,756	24,113		
Establishment and contingencies	-	1,866	1,246	3,112	871	647	213	286	4,456	6,473	-	499	-	310	2,398	3,207	12,792		
2d South Eastern Circle	27,986	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,983	27,986

Public Works Department.—General Abstract of Expenditure during the Year 1861–62—*continued.*

Disbursing Department.	Direction.	Military.			Civil Administration.						Public Improvements.						Grand Total.	Total Expenditure.	Paid from Government Treasuries.
		Army.	Navy.	Total.	Revenue.	General.	Ecclesiastical.	Educational.	Judicial.	Total.	Municipal.	Marine.	Agricultural.	Communication.	Electric Telegraph.	Total.			
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Nuddea rivers	–	–	–	–	–	–	–	–	–	—	–	–	–	—	–	—	—	—	—
Original works	–	–	–	–	–	2,007	–	–	10,272	12,279	–	–	–	50,016	–	50,016	62,295		
Repairs	–	–	–	–	1,619	8	–	36	1,039	2,702	–	–	10,884	89,450	–	1,00,334	1,03,036	2,14,519	1,91,687
Establishment and contingencies	–	–	–	–	178	223	–	3	1,252	1,656	–	–	1,216	46,316	–	47,532	49,188		
Calcutta Canals:														54,609	–	54,609	54,609		
Original works	–	–	–	–	–	–	–	–	–	–	–	–	–	63,695	–	63,695	63,695	2,01,049	2,13,804
Repairs	–	–	–	–	–	4,157	–	–	–	4,157	–	–	–	78,588	–	78,588	82,745		
24-Pergunnahs:																			
Original works	–	–	–	–	–	44	1,602	–	5,063	6,709	–	–	19,351	45,668	–	65,019	71,728		
Repairs	–	–	–	–	468	246	796	–	93	1,603	989	659	23,610	13,678	–	38,936	40,539	1,40,560	1,56,500
Establishment and contingencies	–	–	–	–	156	97	804	–	1,726	2,783	331	220	9,629	15,330	–	25,510	28,293		
Dacca:																			
Original works	–	930	–	930	5,417	10,589	120	–	8,636	24,762	–	–	–	2,852	–	2,852	28,544		
Repairs	–	12,003	–	12,003	5,581	2,042	487	1,769	17,491	27,370	–	574	–	12,985	–	13,559	52,932	1,10,265	1,29,164
Establishment and contingencies	–	4,655	–	4,655	3,959	4,361	218	636	9,018	18,192	–	206	–	5,736	–	5,942	28,789		
Calcutta and Jessore Road:																			
Original works	–	–	–	–	–	–	–	–	13,109	13,109	–	–	–	56,874	–	56,874	69,983		
Repairs	–	–	–	–	197	663	–	239	1,545	2,644	–	–	–	16,759	–	16,759	19,403	1,06,456	1,52,350
Establishment and contingencies	–	–	–	–	38	127	–	45	2,797	3,007	–	–	–	14,063	–	14,063	17,070		
3d Assam circle	23,339	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	23,339	23,539	—
Upper Assam:																			
Original works	–	8,866	–	8,866	–	77	–	–	7,810	7,887	–	–	–	5,064	–	5,064	21,817		
Repairs	–	3,755	–	3,755	75	245	29	260	1,177	1,786	–	–	–	8,653	–	8,653	14,194	49,932	74,127
Establishment and contingencies	–	4,880	–	4,880	29	83	12	100	3,496	3,720	–	–	–	5,321	–	5,321	13,921		
Lower Assam:																			
Original works	–	3,202	–	3,202	690	361	2,256	–	5,002	8,309	–	–	–	8,934	–	8,934	20,445		
Repairs	–	1,373	–	1,373	165	689	80	336	4,706	5,976	–	–	–	12,483	–	12,483	19,832	58,743	72,233
Establishment and contingencies	–	2,095	–	2,095	390	481	1,070	153	4,448	6,542	–	–	–	9,829	–	9,829	18,466		
Sylhet:																			
Original works	–	1,447	–	1,447	–	287	50	–	1,570	1,907	–	–	–	730	–	730	4,084		
Repairs	–	4,437	–	4,437	849	263	326	107	2,974	4,519	–	–	–	2,019	–	2,019	10,975	25,723	45,188
Establishment and contingencies	–	4,164	–	4,164	602	389	264	72	3,225	4,552	–	–	–	1,948	–	1,948	10,664		
4th Northern circle	19,438	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	19,438	19,438	—
Berhampore:																			
Original works	–	25,141	–	25,141	12,941	1,894	–	–	23,740	38,575	–	–	–	82,378	–	82,378	1,46,094		
Repairs	–	10,415	–	10,415	2,832	1,052	65	292	3,877	8,118	–	–	–	3,106	–	3,106	21,639	2,00,048	2,72,913
Establishment and contingencies	–	6,826	–	6,826	3,028	565	12	58	5,305	8,968	–	–	–	16,521	–	16,521	32,315		

BHAUGULPORE:																			
Original works	-	1,039	-	1,039	2.486	208	7	-	13,499	16,200	-	-	-	61,784	-	61,784	79,023	1,24,450	2,33,158
Repairs	-	1,945	-	1,945	2,483	426	-	227	3,602	6,738	-	-	-	10,827	-	10,827	19,510		
Establishment and contingencies	-	782	-	782	1,308	165	2	59	4,500	6,034	-	-	-	19,101	-	19,101	25,917		
DARJEELING ROAD:																			
Original works	-	-	-	-	-	-	-	-	18	18	-	-	-	2,34,940	-	2,34,940	2,34,958	3,73,825	3,34,307
Repairs	-	1,393	-	1,393	1,917	128	-	71	1,255	3,371	-	-	-	2,245	-	2,245	7,009		
Establishment and contingencie	-	184	-	184	251	17	-	10	16	294	-	-	-	31,380	-	31,380	31,858		
DINAGEPOOR:																			
Original works	-	17,623	-	17,623	-	-	8	-	19,162	19,170	-	-	-	59,790	-	59,790	96,583	1,54,750	1,34,000
Repairs	-	7,877	-	7,877	377	216	284	547	1,837	3,261	-	-	-	9,464	-	9,464	20,602		
Establishment and contingencies	-	8,170	-	8,170	122	71	91	178	6,730	7,192	-	-	-	22,203	-	22,203	37,565		
5th Behar Circle	26,890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26,890	26,890	—
DINAPORE:																			
Original works	-	15,214	-	15,214	2,830	-	1,138	-	7,136	11,104	-	-	-	7,530	-	7,530	33,848	99,183	1,49,563
Repairs	-	24,748	-	24,748	1,981	1,138	241	1,252	3,834	8,446	-	-	1,978	8,096	-	10,074	43,268		
Establishment and contingencies	-	11,650	-	11,650	1,443	551	100	345	3,291	5,730	-	-	-	4,687	-	4,687	22,067		
PATNA:																			
Original works	-	-	-	-	18,709	125	4,166	-	10,604	33,604	-	-	-	2,601	-	2,601	36,205	98,978	96,925
Repairs	-	5,438	-	5,438	5,141	3,427	124	138	7,737	16,567	-	-	-	11,417	35	11,452	33,457		
Establishment and contingencies	-	2,288	-	2,288	10,071	1,491	1,801	56	7,707	21,126	-	-	-	5,888	14	5,902	29,316		
2D DIVISION, GRAND TRUNK ROAD:																			
Original works	-	4,096	-	4,096	-	2,275	-	-	-	2,275	-	-	-	1,22,695	-	1,22,695	1,29,066	3,04,118	3,23,677
Repairs	-	2,361	-	2,361	-	1,380	-	-	26	1,406	-	-	-	1,22,868	-	1,22,868	1,26,635		
Establishment and contingencies	-	1,193	-	1,193	-	675	-	-	5	680	-	-	-	46,544	-	46,544	48,417		
RAMGHUR:																			
Original works	-	16,716	-	16,716	-	67	4,112	-	5,655	9,834	-	-	-	38,035	-	38,035	64,585	1,64,174	2,13,279
Repairs	-	14,262	-	14,262	19	329	101	303	2,494	3,246	-	-	-	43,856	743	44,599	62,107		
Establishment and contingencies	-	9,170	-	9,170	7	118	1,248	90	2,420	3,883	-	-	-	24,209	220	24,429	37,482		
PATNA BRANCH ROAD:																			
Original works	-	-	-	-	-	1,185	-	-	-	1,185	-	-	-	18,253	-	18,253	19,438	32,762	70,000
Repairs	-	3	-	3	264	282	1	-	237	784	-	-	-	2,271	-	2,271	3,058		
Establishment and contingencies	-	2	-	2	117	666	-	-	106	889	1	-	-	9,375	-	9,375	10,266		
6th Burdwan Circle	13,270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,270	13,270	—
1ST DIVISION, GRAND TRUNK ROAD:																			
Original works	-	2,159	-	2,159	2,329	2,900	-	-	5,396	10,625	-	-	-	-	-	-	12,784	1,52,210	1,77,652
Repairs	-	15,809	-	15,809	1,142	1,081	225	-	2,694	5,142	-	-	-	95,642	10	95,652	1,16,603		
Establishment and contingencies	-	3,234	-	3,234	624	716	40	-	1,046	2,426	-	-	-	17,161	2	17,163	22,823		
DAMOODAH:																			
Original works	-	-	-	-	-	216	-	-	-	216	-	-	34,822	18,023	-	52,845	53,061	1,36,346	1,56,569
Repairs	-	-	-	-	-	-	-	30	1,006	1,036	-	122	36,746	2,655	-	39,523	40,559		
Establishment and contingencies	-	-	-	-	-	103	-	14	482	599	-	58	34,262	7,807	-	42,127	42,726		
MIDNAPORE:																			
Original works	-	-	-	-	-	2,482	775	-	1,024	4,281	-	-	7,707	13,764	79	21,550	25,831	76,312	1,06,950
Repairs	-	628	-	628	436	434	41	145	2,032	3,088	-	-	18,537	1,448	19	20,004	23,720		
Establishment and contingencies	-	395	-	395	274	1,837	514	90	1,925	4,640	-	-	14,181	9,483	62	23,726	28,761		
TUMLOOK:																			
Original works	-	-	-	-	-	52	-	-	-	52	-	-	4,971	10,155	-	15,126	15,178	1,05,705	1,13,819
Repairs	-	-	-	-	534	208	7	-	267	1.016	-	-	68,921	320	-	69,241	70,257		
Establishment and contingencies	-	-	-	-	126	61	1	-	63	251	-	-	17,532	2,487	-	20,019	20,270		

PUBLIC WORKS DEPARTMENT.—General Abstract of Expenditure during the Year 1861-62—*continued.*

DISBURSING DEPARTMENT.	Direction.	MILITARY.			CIVIL ADMINISTRATION.						PUBLIC IMPROVEMENTS.						GRAND TOTAL.	Total Expenditure.	Paid from Government Treasuries.
		Army.	Navy.	TOTAL.	Revenue.	General.	Ecclesiastical.	Educational.	Judicial.	TOTAL.	Municipal.	Marine.	Agricultural.	Communication.	Electric Telegraph.	TOTAL.			
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
HIDGELEE:																			
Original works	–	–	–	–	1,936	–	–	–	–	1,936	–	–	805	–	–	805	2,741	76,769	1,22,247
Repairs	–	–	–	–	2,748	849	150	–	263	4,010	–	158	35,245	6,945	–	42,348	46,358		
Establishment and contingencies	–	–	–	–	2,630	477	84	–	147	3,338	–	88	20,338	3,906	–	24,332	27,670		
BURRAKUR BRIDGE WORKS:																			
Original works	–	–	–	–	–	956	–	–	–	956	–	–	–	71,573	–	71,573	72,529	94,554	1,71,172
Repairs	–	–	–	–	–	133	–	–	–	133	–	–	–	4,380	–	4,380	4,513		
Establishment and contingencies	–	–	–	–	–	201	–	–	–	201	–	–	–	17,311	–	17,311	17,512		
SYNTHEA ROAD:																			
Original works	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4,812	6,500
Repairs	–	–	–	–	–	–	–	–	–	–	–	–	–	1,054	–	1,054	1,054		
Establishment	–	–	–	–	–	–	–	–	–	–	–	–	–	3,758	–	3,758	3,758		
7th Cuttack Circle	16,926	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	16,926	16,926	–
BALASORE:																			
Original works	–	–	–	–	–	387	–	–	3,114	3,501	–	–	684	7,577	–	8,261	11,762	47,183	58,802
Repairs	–	–	–	–	299	561	135	78	815	1,888	–	–	6,734	15,322	182	22,238	24,126		
Establishment and contingencies	–	–	–	–	101	322	45	26	1,335	1,829	–	–	2,522	6,883	61	9,466	11,295		
CUTTACK:																			
Original works	–	343	–	343	621	1,284	4,451	16	823	7,195	–	–	–	12,795	–	12,795	20,333	44,811	46,505
Repairs	–	2,056	–	2,056	1,706	221	422	819	2,160	5,328	–	–	–	5,435	–	5,435	12,819		
Establishment and contingencies	–	839	–	839	814	526	1,705	292	1,044	4,381	–	–	–	6,439	–	6,439	11,659		
MÂHANUDDY:																			
Original works	–	–	662	662	–	17	–	–	–	17	–	–	8,536	62,125	–	70,661	71,340	1,15,991	1,57,906
Repairs	–	28	–	28	–	–	–	–	–	–	–	2,262	24,263	1,115	–	27,640	27,668		
Establishment and contingencies	–	5	113	118	–	3	–	–	–	3	–	385	5,626	10,851	–	16,862	16,983		
POOREE:																			
Original works	–	–	–	–	1,423	–	–	–	–	1,423	–	–	3,865	5,217	–	9,082	10,505	47,005	51,008
Repairs	–	7	–	7	458	2,307	15	161	477	3,418	–	–	14,167	4,289	–	18,456	21,881		
Establishment and contingencies	–	3	–	3	847	1,038	7	73	335	2,300	–	–	8,116	4,200	–	12,316	14,619		
RAIPORE ROAD:																			
Original works	–	183	–	183	–	–	–	1,095	128	1,223	–	–	–	8,367	–	8,367	9,773	34,437	41,197
Repairs	–	142	–	142	40	90	30	2	4,416	4,578	–	–	–	10,167	–	10,167	14,887		
Establishment and contingencies	–	130	–	130	2	3	1	438	1,810	2,254	–	–	–	7,393	–	7,393	9,777		
Behar irrigation	19,898	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	19,898	19,898	19,898
BY CIVIL OFFICERS:																			
Original works	–	–	–	–	–	–	–	646	1,813	2,459	–	–	–	979	–	979	3,438	4,946	–
Repairs	–	1,508	–	1,508	–	–	–	–	–	–	–	–	–	–	–	–	1,508		
GRAND TOTAL £.	3,69,155	6,05,435	89,726	6,95,161	2,42,517	2,48,801	43,331	30,817	3,70,359	9,35,825	1,320	7,576	4,35,248	22,84,362	15,155	27,43,661	42,43,802	47,43,802	54,38,355

(M. 1.)

Statement showing the number of Patients treated in the Charitable Hospitals and Dispensaries in Bengal.

DISPENSARIES.	Number of In-patients treated.	Number of Out-patients treated.	Total Number of Patients treated.	Cost of Establishment.			Total Expenditure.			Average Expenditure per head.		
				Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Akyab General Hospital	205	2,584	2,789	3,918	8	3	5,346	15	10	1	14	8
Alipore	611	4,932	5,543	2,656	–	–	2,781	12	3	–	8	–¼
Arrah	123	2,113	2,236	1,920	–	–	2,011	6	2	–	14	4¾
Balasore	93	902	1,095	474	–	–	826	8	5	–	12	1
Bancoorah	102	508	610	333	8	–	463	13	9	–	12	2
Baraset	49	7,710	7,759	506	3	3	1,088	15	5	–	2	3
Bauleah	393	4,553	4,946	1,505	12	–	2,013	7	9	–	6	6
Beerbhoom	36	1,146	1,182	216	–	–	309	13	6	–	4	2½
Bhaugulpore	57	2,287	2,344	3,101	5	8	3,281	1	8	1	6	4¾
Bhudruck	163	328	491	108	–	–	267	–	8	–	8	8¼
Buddibatty	–	1,929	1,929	630	–	–	667	8	6	–	5	6½
Bograh	230	1,652	1,882	292	–	–	489	7	9	–	4	2
Berhampore	111	6,645	6,756	3,281	–	–	3,337	12	1½	–	7	10¾
Burdwan	451	3,163	3,614	3,152	1	9	4,180	6	6	1	2	6
Burrisaul	129	3,523	3,652	644	11	3	861	15	9½	–	3	9¼
Chittagong	142	5,570	5,712	1,175	5	6	1,508	10	3	–	4	2¾
Chyebassa	–	507	507	48	–	–	47	12	11	–	3	4¾
Cuttack	313	2,574	2,887	1,699	3	10	4,066	13	11¾	1	6	6½
Dacca Mitford Hospital	673	13,633	13,700	5,996	–	–	9,749	4	9½	–	11	4½
Dinapore	90	4,110	4,200	768	–	–	1,548	7	1	–	5	10¾
Dwarbassiny	–	2,188	2,188	668	–	–	739	5	1	–	5	5
Gyah	228	3,656	3,884	4,291	–	–	4,859	7	6	1	4	–¼
Howrah General Hospital	1,025	11,118	12.143	2,519	5	10	11,705	8	10	–	15	5
Hooghly	495	5,198	5,693	3,908	10	8	6,047	5	2	1	1	–
Jessore	125	1,754	1,883	832	–	–	1,279	10	1	–	10	10½
Kishnaghur	314	3,981	4,295	3,300	6	9	3,695	6	1	–	13	9
Kyouk Phyoo	201	193	394	876	–	–	968	8	–	2	7	4
Midnapore	389	5,499	5,888	2,932	15	–	3,861	13	8½	–	10	5½
Monghyr	171	2,971	3,142	1,323	5	7	2,195	1	6	–	11	2
Moorshedabad	178	8,167	8,345	3,258	–	–	3,459	10	5	–	6	7½
Mozufferpore	286	12,752	13,038	2,706	–	–	3,548	15	2	–	4	4¼
Moteeharee	937	11,084	12,021	912	–	–	1,078	13	3	–	1	5¼
Mulnauth	85	1,979	2,064		—			—			—	
Mymensing	72	2,633	2,705	390	–	–	604	4	10	–	3	7
Noakholly	52	2,399	2,451	1,303	12	–	1,539	12	6	–	10	–½
Nattore	–	2,620	2,620	1,116	–	–	1,177	6	–	–	7	2
Ooterparah	166	3,781	3,947	2,102	5	3	2,670	4	–	–	10	9¾
Patna	116	11,574	11,690	4,270	–	–	5,242	4	5½	–	7	2
Pooree	524	5,385	5,909	1,802	15	–	2,497	7	7	–	6	9
Pubna	55	1,252	1,307	1,080	8	6	1,292	9	5	–	15	10
Purneah	64	1,539	1,603	819	14	5	1,000	10	7	–	9	11¾
Ranchee	29	266	295	185	1	6	292	11	6	–	15	10½
Rungpore	156	5,049	5,205	1,589	15	9	2,170	2	11	–	6	8
Sarun	102	1,806	1,908	2,568	8	–	3,088	10	7	1	9	10¾
Serampore	132	3,193	3,325	1,002	–	–	1,417	10	3	–	6	9¾
Sukeas'-street	152	6,640	6,792	4,077	1	3	5,564	14	3	–	13	1¼
Tipperah	147	2,516	2,663	431	8	4	928	15	10	–	5	7

No Returns had been received at the close of the year, from the Dispensaries of Bhowanipore, Chuckdiga, Culna, Cutwa, Gowhatty, Gowalparah, Goburdanga, Magoorah, Serajgunge, Titalyah, and Tumlook.

(M. 2.)

Comparative Statement of Vaccination in the Lower Provinces for Six Years, from 1856 to 1861.

YEARS.	DIVISIONS.							
	Presidency.		Barrackpore.		Dacca.		Dinagepore.	
	Number Vaccinated.	Successful Cases.	Number Vaccinated.	Successful Cases.	Number Vaccinated.	Successful Cases.	Number Vaccinated.	Successful Cases.
1856 - - -	9,848	7,887	44,439	41,992	5,467	3,971	4,911	3,545
1857 - - -	16,157	13,669	22,574	20,688	7,286	4,779	5,885	4,260
1858 - - -	13,260	11,729	22,664	20,708	6,894	4,924	5,787	4,145
1859 - - -	10,821	9,451	37,546	35,792	5,645	3,672	4,573	2,768
1860 - - -	9,157	7,849	19,491	16,291	5,756	3,568	4,704	2,886
1861 - - -	14,874	13,231	41,259	38,676	5,715	3,918	4,662	3,471

(N. 1.)

Statement of work done by Professional Survey Parties in the Lower Provinces during the Year.

Division.	Name of Surveyor.	District under Survey.	Number of Hulkahs or Village Circuits Surveyed.	Average size of Village Circuits in Acres.	Approximate area in square miles.	Estimated total cost of all kinds, from October 1861 to September 1862.			Rate per square mile on surveyed area.		
						Rs.	*as.*	*p.*	*Rs.*	*as.*	*p.*
1st Division	Mr. R. B. Smart, Revenue Surveyor.	Tipperah - -	1,596	503	1,256	34,419	5	2	27	6	5
2d Ditto -	Major J. L. Sherwill	Maunbhoom, - Darjeeling -	733	Maunbhoom 736½ Darjeeling 640	836	45,994	–	9	55	–	3
3d Ditto -	Mr. N. T. Davey -	Sylhet - -	1,223	612	1,170	41,533	2	9	35	7	11
4th Ditto -	Major J. E. Gastrell	Backergunge -	903	126	1,400	48,700	15	3	34	12	6
5th Ditto -	Mr. J. H. O'Donel -	Chittagong -	87	24,276	3,300	51,576	11	–	15	10	–
		[The Topographical Survey of Hills South of the Kurnafoolee River.]									
6th Ditto -	Capt. G. H. Thompson	Hazareebaugh -	158	14,557	2,300	35,661	6	3	15	8	–
				Mouzawar -	4,662						
				Topographical	5,600						
				Total -	10,262	2,57,885	9	2	25	2	–

(N. 2.)

STATEMENT of Work done by Non-Professional Survey Parties, from 1st May 1861 to 30th April 1862.

DIVISION.	Name of Superintendent or Collector.	District in which Demarcation is going on.	Number of Villages Demarcated.	Estimated Area Demarcated in Square Miles.	Number of Thakbust Maps made over to Surveyor.	Number of Boundary Dispute Cases decided.	Number of other Descriptions of Cases disposed of.	Number of Duplicate Maps prepared.	Number of Registers Completed.		Estimated Expenditure from May to April.			Rate per Square Mile in Area Demarcated.	REMARKS.
									Mouzahwar.	Mehalwar.	*Rs.*	*a.*	*p.*		
1st Division -	Mr. E. Grey, from 1st May to 27th April 1861. Mr. A. B. Falcon, from 2d December 1861 to 30th April 1862.	- -	–	–	–	66	405	226	18	18	24,741	9	1	- -	- - No demarcations were effected by this Division. Two Peshkars and 20 Ameens only were employed under the name of Field Establishment. Their time was taken up in mapping the results of season 1860-61, and completing Mehalwar demarcations rendered necessary in consequence of boundary disputes, and in re-copying maps and papers which had become worm-eaten and dilapidated in the offices of the Superintendent himself and of the Collector of Pubna. The Ministerial Establishment was employed in the compilation of the Registers of the Pubna, Bograh, Rajshahye, Rungpore, and Dinagepore Districts. The Superintendent is unassisted in this Division, and, from May to August, Mr. E. Grey conducted the duties of the office in addition to those of Collector of Dinagepore. This arrangement was originally made at the Board's recommendation, but was subsequently abandoned by order of Government.
2d Division -	Mr. J. F. Browne, Superintendent.	Tipperah	1,652	400	1,646	436	1,147	1,484	- -	- -	38,325	8	11	95 13 0	- - Mr. Browne, the Superintendent, is assisted by a Deputy Collector and three Peshkar's parties. Towards the close of the year the number of Ameens has been augmented to 70.
Collector of Burdwan.	Mr. S. Hogg - -	- -	–	–	–	7	377	–	Bengalee 3 Perghs., 571 Mouzahs. English 10 Perghs., 3,076 Mouzahs.	Bengalee 14 Perghs., 7,635 Mouzahs. English 4 Perghs., 2,174 Mouzahs.	2,905	12	4	-	- - The work here consists entirely of compilation of Registers of the Survey under the direction of the Collector, the demarcation having been completed some time ago by the 2d Division.
3d Division -	Mr. H. J. Reynolds, Superintendent.	Sylhet -	3,274	1,190	1,667	275	11,854 including 6,841 ezad and 294 appeal cases.	1,924	Bengalee, 44, English, 40.	Bengalee, 44, English, 40.	82,225	–	–	69 1 6	- - The Superintendent has at present a covenanted Assistant, three Deputy Collectors, nine Peshkars, and 90 Ameens. One Deputy Collector died during the year, and his field party was transferred to the 2d Division. The field parties were employed in Sylhet. A Deputy Collector with two Mohurirs carried on the registry work in Dacca. In this District the compilation of Registers is the only operation remaining, with occasional local inquiries. The completed Registers of 31 Pergunnahs have been made over to the Collector during the year. In Sylhet the internal plotting has been very great, the number of Mehalwar Chucks amounting to no less than 94,360. About 750 miles remain for survey, exclusive of Jynteah. The Towjee Nikas papers of 38 Pergunnahs have been completed, making 60 Pergunnahs in all completed.
Collector of Mymensing.	Mr. A. Smith - -	- -	–	–	–	–	- -	–	26	29	470	9	–	- -	The work in this district is reported to be completed.
4th Division -	Mr. F. H. Pellew, Officiating Superintendent.	- -	74	60	–	60	6,298	–	25	24	33,000	12	8	- -	- - In this Division the compilation of the Registers of Furreedpore, Backergunge, and Jessore is the only work remaining to be done. A Field Establishment of 45 Ameens is still retained for local inquiries, with a view to clear up doubtful points.
5th Division -	Captain G. H. Thompson, Revenue Surveyor.	Maunbhoom and Chota Nagpore.	2,201	1,858	2,497	165	54	–	2,136 (Statistical).	7	5,367	–	11	2 14 3	- - The demarcations here are little more than nominal, the survey being for the most part a topographical one. The settlement of 180 resumed Mehals in Khuruckdea was also made by Captain Thompson, chiefly from the professional details of the Survey with the aid of the Putwaries measurements of fields.
			7,201	5,830	5,810	1,009	20,135	3,634	5,936	9,971	1,87,036	4	11		

Chap. IX.
Bengal.

(N. 3.)

Statement exhibiting the Use made of Survey Records by Public Officers and Private Persons.

DIVISION.	Number of Maps.		Number of other Papers.		Total.	
	Required by Public Officers.	Required by Private Individuals.	Required by Public Officers.	Required by Private Individuals.	Required by Public Officers.	Required by Private Individuals.
Bhaugulpore - -	- -	1,482	41	142	41	1,624
Burdwan - - -	- -	2,611	- -	316	- -	2,927
Chittagong (District)	- -	2	81	10,589	81	10,591
Cuttack - - -	3	62	8	1,987	3	2,049
Dacca - - -	- -	1,578	29	1,392	8	2,970
Nuddea - - -	58	593	448	331	87	924
Patna - - -	467	1,180	5	2,446	915	3,626
Rajshahye - -	7	1,286	- -	366	12	1,652
Goalpara (District) -	- -	14	- -	16	- -	30
1st Survey Division -	225	1,033	- -	11	225	1,044
2d " "	3	9	- -	213	3	222
4th " "	105	2,954	- -	2,072	105	5,026
5th " "	8	184	- -	439	8	623
Total - - -	876	12,988	612	20,320	1,488	33,308

CHAPTER X.

MADRAS.

Chap. X.
Madras

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CHAPTER X.

Chap. X. Madras.

MADRAS.

ANNUAL REPORT on the Administration of the Madras Presidency, during the Year 1861-62.

The only change which has taken place, during the past year, in the personnel of the Madras Government was caused by the appointment of His Excellency Lieutenant General Sir James Hope Grant, G.C.B., to the Command of the Madras Army, and to the office of Second Member of Council, in succession to Sir Patrick Grant, G.C.B. Sir Hope Grant landed at Madras, and took his seat in Council, and the command of the Army, on the 26th December 1861.

The Right Reverend Frederick Gell, D.D., appointed to the bishopric of Madras, on the death of the Right Reverend Thomas Dealtry, arrived at Madras on the 25th November 1861, and was installed on the 27th of the same month.

Towards the close of the year under report, and in accordance with instructions from the Home and Supreme Governments, the district of North Canara, with the exception of the Taluq of Cundapoor, was transferred from the Madras Presidency to that of Bombay.

LEGISLATIVE.

2. The provisions of Act 24 & 25 Vict. c. 67, under which the power of legislating for local purposes was restored to the Madras Government, were brought into operation on the 14th January 1862. Under Section XXIX. of the Act, the following gentlemen were appointed members of the Council for making laws and regulations in addition to the ordinary members of the Executive Council.

Official.—Mr. Thomas Sydney Smyth, Advocate General; Mr. Thomas Pycroft, Chief Secretary to Government; and Mr. Charles Pelly, first member of the Board of Revenue.

Non-Official.—Mr. Robert Orr Campbell, Chairman of the Chamber of Commerce; Mr. William Reierson Arbuthnot, ex-Chairman of the same body; and Vembācam Sadagopah Chārlu, a native Pleader in the court of Sudder Udalut. Mr. John Dawson Mayne, barrister at law, was appointed Clerk of the Council.

The Council sat nine times, its first meeting having been held on the 22d January, and its last on the 6th May 1862. It now stands adjourned.

During this period ten Bills were introduced, of which seven were passed, two were referred to special committees which have not yet made their reports, and one has not been proceeded with, but awaits the sanction of the Governor General to its introduction, under Act 24 & 25 Vict. c. 67, Section 19, Clause 2. Notice had been given by the Honourable V. Sadagopah Chārlu of his intention to introduce a further Bill for the peremptory registration of deeds, but the Bill was not brought forward, as a similar measure was found to be under consideration in the Council of the Governor General of India.

The most important of these legislative measures are Acts V. and VII.

Act V.

The object of Act. V. is to provide a new charter of incorporation for the bank of Madras, in lieu of that contained in Act IX. of 1843.

While repealing the existing law, the new Bill re-enacts it with the modifications and amendments necessary, consequent on the withdrawal of the bank's privilege to issue promissory notes payable to bearer on demand, and the transfer to the bank of the business of the Government treasury at Madras, and the establishment by the bank of the agency of issue for the Madras circle, of the Government notes payable under the Currency Act.

Act VII.

The object of this Act is to abolish the restrictions imposed by Regulation IV. of 1831, and Acts XXXI. of 1836, and XXIII. of 1838. These restrictions were intended to guard against alienations, and secure the enjoyment of Inam grants to the grantees and their families, and to protect the reversionary interests of the Government. Under a recent liberal policy, the Government has decided to convert these grants, on certain conditions,

CHAP. X.
Madras.

ditions, into permanent private property, the holders of which are to have the most full and unfettered rights of enjoyment and alienation, the grants becoming subject to the jurisdiction and process of the Civil Courts, like ordinary landed property.

The following schedule exhibits the enactments which have been introduced, the names of the members by whom they were proposed, and the stage to which they have advanced.

The Hon. T. Pycroft - -	Bill for the levy of port dues in the port of Ganjam.	Passed as Act I. of 1862.	Assented to by Governor General.
Ditto - - - - -	Bill to extend the provisions of Act XXV. of 1859, entitled An Act to prevent the over-crowding of vessels carrying Native passengers in the Bay of Bengal.	Act II. of 1862.	Ditto.
The Hon. T. S. Smyth -	Bill for enabling the Commissioner of Police at Madras to make bye-laws for more effectually carrying out in the town of Madras, the objects of Acts XIII. of 1856, and XLVIII. of 1860, and for the better and more effectual preservation of order therein.	Act III. of 1862.	Ditto.
The Hon. W. A. Morehead	Bill to make better provision for the management of boats and catamarans in the Madras roads.	Act IV. of 1862.	
The Hon. T. Pycroft -	Bill for regulating the Bank of Madras.	Act V. of 1862.	Ditto.
The Hon. W. A. Morehead	Bill to prevent damage to the pier, to regulate the traffic, and to provide for the levying of tolls upon the same.	Act VI. of 1862.	
The Hon. E. Maltby -	Bill to exempt enfranchised Inams from the operation of Regulation IV. of 1831, and Acts XXXI. of 1836, and XXIII. of 1838.	Act VII. of 1862.	Ditto.
Ditto - - - - -	Bill for amending and codifying the laws which relate to the recovery of revenue and rent, and define the powers and duties of servants of Government entrusted with the realization of Land Revenue.	Referred to a Special Committee.	
The Hon. V. Sadagopah Chārlu.	Bill for organizing a popular form of Municipal Corporation in lieu of the present Municipal Board for the town of Madras.	- - ditto.	
Ditto - - - - -	Bill for enabling Government to divest itself of religious endowments of Hindoos and Mahomedans, and for the better protection of such endowments.	The introduction of this Bill awaits the sanction of the Governor General.	

JUDICIAL.

CIVIL JUSTICE.

Original suits pending, instituted, and disposed of.

3. At the close of the year 1860, 68,855 original suits were pending on the files of the several courts, and 2,82,976 were instituted during 1861, making a total of 3,51,831, of which 69,214 were brought before Punchayets and Village Moonsiffs; and the remaining 2,82,617 before the following courts:—

Civil Courts, including Government Agents - - -	3,268
Subordinate Courts, ditto, Assistant ditto - - - -	2,105
Principal Sudder Ameens - - - - - - -	1,325
Sudder Ameens - - - - - - - -	6,852
District Moonsiffs - - - - - - - -	2,69,067

4. The

1861 - -	2,82,976
1860 - -	1,37,834
Excess - -	1,45,142

4. The number of suits instituted in 1861, exhibits an excess of 1,45,142 over the number instituted in the previous year, which is owing in a great measure to the Act for the Limitation of Suits (No. XIV. of 1859), which was to have come into operation on the 1st May 1861 (though it was afterwards, by Act XI, of 1861, postponed to the 1st January last), having had the effect of inducing parties whose claims were affected by it to institute their suits prior to those dates.

Of the 3,51,831 suits which came before the several courts, 1,85,651, or 53 per cent., were disposed of, leaving 1,66,180 pending at the close of the year.

Of the number disposed of, 65,092, or 35 per cent., were decided, after full investigation of the facts, in favour of plaintiffs; and 13,780, or 7 per cent., for defendants; 72,557, or 39 per cent., were privately adjusted or withdrawn; and 34,222, or 19 per cent., were disposed of in other ways: 2 per cent. of the suits disposed of were tried by civil and subordinate Judges, and 98 per cent. by Principal Sudder Ameens, Sudder Ameens, District and Village Moonsiffs.

Average duration of suits.

5. The subjoined table exhibits a general decrease of the average duration of suits as compared with the previous year:—

	1860.			1861.		
	Years.	*Months.*	*Days.*	*Years.*	*Months.*	*Days.*
Civil Court - - - - - - - -	1	4	11	1	–	16
Subordinate Court - - - - - - -	1	4	16	1	2	9
Principal Sudder Ameen's Court - - - -	–	10	23	–	10	20
Sudder Ameen's Court - - - - - -	–	9	1	–	8	18
District Moonsiff's Court - - - - - -	–	7	11	–	6	25

Description of suits.

6. The following table shows the description of the suits instituted in 1861, from which it will be observed that the largest proportion, or 89 per cent., were connected with debts, wages, &c.:—

Connected with land rent or revenue - - - - - -	5,388
Otherwise connected with land - - - - - -	13,010
For houses or other fixed property - - - - - -	4,981
Connected with debts, wages, &c. - - - - - -	2,43,673
Connected with caste, religion, &c. - - - - -	449
Connected with indigo, sugar, silk, &c. - - - - -	5,735

Value of suits pending.

7. The total value of the suits pending at the close of 1861 was *Rs.* 14,285,591. 7. 8., being *Rs.* 5,30,072. 13. 9. less than in the preceding year.

Appeals pending, filed, and disposed of.

8. The number of appeals which came before the lower appellate courts, inclusive of those pending at the close of 1860, was 19,216, of which 2,617, or 14 per cent., were decreed on the merits in favour of appellants, and 4,397, or 23 per cent., in favour of respondents; 272, or 1 per cent., were remanded to the lower courts; 304, or 2 per cent., were dismissed for default; 5,594, or 29 per cent., were otherwise disposed of; and 6,032 were undisposed of at the close of 1861.

Average duration of appeals.

9. The average duration of appeals on the files during 1861 was 9 months and 12 days.

Execution of decrees.

10. Out of 73,928 applications for execution of decrees pending and received, 61,625, or 83 per cent., were disposed of, leaving 12,303, or 17 per cent., pending at the close of the year, of which only about 18 per cent. were on the files more than two months.

Petitions.

11. There were 1,40,991 petitions pending and received, of which 1,38,506, or 98 per cent., were disposed of, and 2,485 were pending at the close of the year.

Operations of the Sudder Court.

12. The following table exhibits the number of appeals, regular and special, which came before the Sudder Court, and the manner in which they were disposed of:—

	Regular.	Special.
Pending on 1st January 1861 - - - - - - - -	21	592
Received in 1861 - - - - - - - - - - -	67	869
Total - - -	88	1,461
Confirmed - - - - - - - - - - - - -	15	613
Amended - - - - - - - - - - - - -	2	10
Reversed - - - - - - - - - - - - -	4	88
Remanded - - - - - - - - - - - - -	2	5
Dismissed for default - - - - - - - - -	–	57
Adjusted or withdrawn - - - - - - - - -	1	16
Otherwise disposed of - - - - - - - - -	1	2
Total - - -	25	691
Depending on the 31st December 1861 - - - -	63	770

Establishment of courts of small causes in the provinces.

13. The question of providing for the cheaper and more speedy administration of justice, by investing the courts with small cause jurisdiction, has long engaged the attention of the Madras Government. So far back as 1854* they recommended that, as an experimental measure in this direction, the final jurisdiction which the district moonsiffs in this Presidency have long exercised under Section XLIII., Regulation VI. of 1816, should be extended to 50 rupees, being of opinion that the final jurisdiction of those officers might safely be increased to that extent. In the original draft of the Small Cause Court Act (XLII. of 1860) it was provided that in addition to establishing new courts of small causes, each local government should have the power of investing any court subordinate to a district court with small cause jurisdiction. In their remarks† on the Bill, the Madras Government again recommended that small cause jurisdiction up to 50 rupees should be entrusted to district moonsiffs, and they proposed that similar jurisdiction up to 500 rupees should be vested in the zillah judges, whose courts were situated generally in the chief town of the district. "Thus," they observed, "the system would have a fair trial, and without any charge to the finances." In the Act, however, as passed, it was provided that "no judge of any court constituted under this Act shall exercise any civil jurisdiction except under the provisions of this Act," and the local governments were consequently precluded from conferring the powers of a small cause court on any of the existing courts. They could only, with the previous sanction of the Governor General in Council, create new and special courts, whose decrees were to be final up to 500 rupees, but which could not try by the ordinary civil procedure any suits for personalties beyond that limit, nor any suits for real property of a value however small. The establishment of even a limited number of such new courts could not be accomplished, save at a cost which, in the then state of the finances, the Madras Government did not consider themselves at liberty to recommend; for it was very doubtful whether such a reduction of existing judicial establishments could eventually be made as would fully compensate for the increased charge that would be occasioned by these courts of purely small cause jurisdiction, inasmuch as at stations where such courts might be established it would still be necessary to maintain courts of other jurisdiction for the disposal of suits of real property and for personal property of a value exceeding 500 rupees. For these reasons the Madras Government repeated‡ their former proposal that they should be empowered to invest any of the existing courts with small cause jurisdiction. Their representations were communicated by the Supreme Government to the Legislative Council at Calcutta; but beyond the passing of Act XII. of 1861, which empowers the local government to invest small cause courts established under the Act of the previous year with the ordinary powers of a principal sudder ameen, nothing has yet been done to meet the views of this Government. They are still precluded from investing the district moonsiffs with small cause court jurisdiction beyond that which they have long exercised in suits for personalty not exceeding 20 rupees; and for the establishment of every new small cause court the sanction of the Government of India has to be obtained.

Towards the latter part of the year under review, the necessity of taking some steps which might relieve the over-burdened files of the district moonsiffs in certain districts pressed itself upon the consideration of this Government. It appeared from returns furnished by the Sudder Court that in eight of the moonsiffs' courts the number of suits on the file ranged from 1,769 in the Mudura court, to 3,500 in that at Mayaveram, and it was calculated that it would take some two years and a half to decide the suits actually pending, without taking into account those which might be afterwards instituted. As the best remedy available under the existing law for this serious evil, and one which could be effected at a trifling increase of charge, the Government obtained authority to convert six of the courts of subordinate judges into small cause courts under Acts XLII. of 1860 and XII. of 1861. The new courts are stationed in the zillahs named in the margin. They opened on the 15th of July. The territorial jurisdiction of each is conterminous with the zillah in which it has been established, and in addition to the head-quarter station one or more places have been fixed on in each zillah at which the small cause court is to hold sittings under arrangements sanctioned by the Sudder Court. Now that the power of local legislation has reverted to the local governments, it is probable that the question of giving effect to the views of the Madras Government in regard to investing the district courts of all grades with small cause jurisdiction will be brought before the local legislature at an early date.

Chittoor. Tanjore.
Cuddalore. Madura.
Negapatam. Tellicherry.

Increase to the salaries of the district moonsiffs.

11 first-class moonsiffs at - -	*Rs.* 200
32 second-class ditto - - -	,, 150
79 third-class ditto - - - -	,, 100

14. Another measure which is calculated to raise the efficiency of the inferior courts in this Presidency by attracting better men to the lower grades of the judicial department, viz., the raising of the salaries of the district moonsiffs and of the clerks attached to their courts, has been recently sanctioned. Hitherto the salaries of the district moonsiffs in this Presidency have ranged from 100 rupees to 200 rupees per mensem, as shown in the margin. The sum allowed for the establishment of clerks, &c., including contingent charges, was, in the case of 1st and 2d class moonsiffs, 85 rupees, in that of 3d class moonsiffs, 70 rupees. In the year 1855, the Madras Government represented to the Government of

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* Letter to the Legislative Council of India, 26th October 1854, No. 777.

† In letter to Member for Madras, dated 8th February 1859, No. 164, published in Papers printed by order of the Legislative Council.

‡ In letter to the Secretary to the Government of India, 2d March 1861.

India the inadequacy of this scale of salary. During the seven years which have since elapsed, the position of the district moonsiffs and their establishments has not only not improved, but, as compared with the position of public servants in other branches of the service, has actually and very seriously retrograded. In other departments of the State, the principle that adequate remuneration should be attached to the performance of arduous and responsible duties has, for some time past, been fully recognised. In the Revenue branch, the deputy collectors draw from 250 rupees to 600 rupees per mensem, besides travelling allowance. The salaries of the tahsildars have been greatly raised. In the Public Works Department, sub-engineers, besides a travelling allowance of three rupees per diem, draw pay from 250 rupees to 400 rupees monthly. In the Inam Commission, in the revenue survey and settlement, and in the forest department, there are several well-paid uncovenanted appointments. This principle, with the sanction of the Government of India, has now to a certain extent been applied to the subordinate judicial service, and the salaries of the district moonsiffs will for the present stand as follows:—

10 first class - - - - - - -	300 rupees.
10 second class - - - - - -	250 ,,
98 third class - - - - - -	200 ,,

The allowances authorised for the establishments attached to these courts have also been raised to a uniform scale of 120 rupees per mensem.

CRIMINAL JUSTICE.

Petty offences.

15. The number of persons brought before the police and magistracy in 1861 charged with petty offences, including those under trial at the close of 1860, amounted to 2,34,339, exhibiting an increase of 4,472, in comparison with the preceding year. Of these 87,021, or 53 per cent., were acquitted, 96,035, or 29 per cent., were released upon the charges preferred against them being compromised, and 76,716, or 47 per cent., were convicte and punished. The number dealt with by the village police was 27,934, or 12 per cent. by the district police, 1,96,239, or 84 per cent.; and by the magistracy, 9,430, or 4 pe cent.

Crimes and demeanors.

16. The total number of cases of crimes and misdemeanors brought before the police, magistracy and courts was 12,170, in which 32,183 persons were concerned, showing an increase over the preceding year of 2,353 cases, and 7,453 persons. Of the number of persons charged, 18,814, or 58 per cent., were released by the police and magistracy, leaving 11,895 persons who were put upon their trial, of whom 1,891 were dealt with by the magistracy, under Act VII. of 1843—6,524 by the subordinate Criminal Courts, 3,104 by the Session Courts, and 376 by the Sudder Court.

Of the number of persons brought to trial before the magistracy and the lower courts 5,363, or 46 per cent., were convicted and punished; 5,719, or 50 per cent., were acquitted and released; and 437, or 4 per cent., were held to security.

Criminal work of the Sudder Court.

17. Of 378 prisoners, whose cases were referred to the Sudder Court, 179, or 47 per cent., were acquitted, and 197, or 52 per cent., were convicted, the case of the remaining two prisoners having been remanded to the Session Court for disposal.

Of the 197 prisoners convicted by the Sudder Court, 118, or 60 per cent., were sentenced to various periods of imprisonment; 37, or 19 per cent., were sentenced to transportation for life; and 42, or 21 per cent., to suffer death.

The following table exhibits the average duration, in days, of criminal cases referred to the Sudder Court:—

	From Apprehension to Commitment.	From Commitment to Reference.	From Reference to Receipt.	From Receipt of Reference to Sentence.	Total from Apprehension.
	No. of Days.	*No. of Days.*	*No. of Days.*	*No. of Days.*	*No. of Days.*
1857 - - - -	21	55	7	10	93
1858 - - - -	16	43	7	6	72
1859 - - - -	17	43	7	6	73
1860 - - - -	21	47	7	8	83
1861 - - - -	17	45	6	6	74

POLICE.

MOFUSSIL POLICE.

18. Progress made in occupying the Districts.—Police arrangements were complete in six[*] districts within the official year, 1860-61. Seven[†] more districts were completed during the official year under review. Three[‡] districts only of those entered upon before the beginning of the official year remained incomplete at its close. The operation of Act XXIV. of 1859 was extended to all the five[§] remaining districts of the Presidency during the year under review. In each of these, although still incomplete, very promising progress has been made; and within six months from the commencement of the current year, the entire Presidency will be under the operation of the Police Act.

19. Duty undertaken.—The following tabular statement shows that, of a country comprising 1,45,000 square miles (the area of the Presidency), and containing 23,325,355 inhabitants, 1,19,000 square miles, containing 21,171,404 inhabitants, were already under police occupation at the end of the year. Sixty-eight towns and cantonments have the requisite watch and ward maintained in them. All the gaols in the country (Calicut excepted), containing about 6,250 prisoners, are guarded and worked by the constabulary. They are in charge of 185 treasuries, and the entire treasure escort duty was performed throughout the year by the constabulary alone. The salt preventive duty is being steadily, and it is hoped successfully, undertaken *pari passu* with the general duty of the police.

—	Area.	Population.	No. of Taluqs and Zamindari Divisions.	Total Force to be raised.	Progress made up to 30th April 1861.								—
					Force raised.	Area of Districts undertaken.	Their Population.	Taken up by the New Police.					
								No. of Taluqs.	No. of Towns.	No. of Cantonments.	No. of Gaols.	No. of Treasuries.	
Ganjam - -	7,657	9,48,124	9	1,450	1,331	2,552	6,21,598	5	3	–	1	5	Incomplete.
Vizagapatam -	18,935	15,71,854	13	1,644	1,630	14,935	14,71,854	12	3	1	1	18	ditto.
Godavery -	7,533	13,21,091	13	1,502	971	4,132	7,66,984	7	2	2	1	8	ditto.
Kistna - -	8,353	12,07,191	13	1,511	1,477	1,916	3,65,169	3	2	–	2	4	ditto.
Bellary - -	11,351	10,64,122	15	1,514	1,249	9,005	8,56,081	12	3	1	1	13	ditto.
Kurnool - -	7,984	6,74,048	8	1,230	933	7,984	6,74,048	8	3	–	1	9	Complete.
Cuddapah -	9,140	10,56,860	11	1,383	1,323	9,140	10,56,860	11	1	–	1	12	ditto.
Nellore - -	8.341	9,58,423	13	1,289	1,124	8,341	9,58,423	13	2	2	1	14	ditto.
North Arcot -	7,526	14,52,549	14	1,486	1,467	7,526	14,52,549	14	3	2	2	10	ditto.
South Arcot -	4,933	11.85,625	8	1,158	1,126	4,933	11,85,625	8	3	1	1	9	ditto.
Madras - -	3,010	6,11,209	6	784	783	3,010	6,11,209	6	2	3	2	7	ditto.
Salem - -	7,610	13,24,200	9	1,211	1,221	7,610	13,24,200	9	2	–	1	10	ditto.
North Canara -	4,300	8,65,032	6	1,068	758	4,300	8,65,032	6	3	–	1	7	ditto.
South Canara -	3,480	6,43,602	4	732	664	3,480	6,43,602	4	1	–	1	5	ditto.
North Malabar	2,889	5,83,186	4	635	540	2,889	5,83,186	4	2	1	2	4	ditto.
South Malabar	3,372	10,85,442	6	1,071	893	2,550	8,80,576	4	3	–	1	6	Incomplete.
Coimbatore -	8,099	12,27,208	11	1,115	1,067	7,206	21,11,204	10	3	1	2	11	ditto.
Tanjore - -	3,720	15,80,264	9	1,555	1,536	3,720	15,80,264	9	5	–	3	13	Complete.
Trichinopoly -	3,097	8,09,580	5	891	883	3,097	8,09,580	5	1	1	1	6	ditto.
Madura - -	8,716	17,91,346	8	1,437	1,332	8,716	17,94,346	8	3	–	2	8	ditto.
Tinnevelly -	5,144	13,64,399	9	1,238	681	1,967	5,62,084	4	2	1	1	6	Incomplete.
Total -	1,45,190	2,33,25,355	194	25,904	22,989	1,19,009	2,11,71,474	162	52	16	29	185	

20. Military Relief.—The relief of the military from all duty of a civil nature has been completed during the year. There was not, throughout the entire Presidency, a single detachment or guard of troops absent from their respective head quarters, either to guard public property, treasure, or convicts, or to maintain local peace at the close of the year under review. The annexed statement shows the number of detachments and guards relieved by the police throughout the Presidency. In the Northern Circars, most of the reliefs were made by the Sibbandi corps, now incorporated with the police, before the introduction of the Constabulary Act. These reliefs are still maintained by the armed reserves of the respective districts, and all charges are debited to the police establishment, to the permanent relief of the military forces and budget. The armed reserve of the Ganjam police still garrisons Russelcondah, rendering practicable the continued withdrawal of an entire native regiment; and the Malabar armed police supports the European detachment at Malapuram.

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[*] Kurnool, North Arcot, Madras, South Arcot, Tanjore, North Canara.

[†] Nellore, Cuddapah, South Canara, North Malabar, Salem, Madura, and Trichinopoly.

[‡] Bellary three taluqs unoccupied—Coimbatore one taluq unoccupied—South Malabar two taluqs unoccupied.

[§] Ganjam, Vizagapatam, Godavery, Krishna, and Tinnevelly.

STATEMENT of Detachments and Guards of Effective Troops and Veterans relieved by the Constabulary.

	Number of Detachments and Guards.	European and Native Officers.	Rank and File.	
Northern Division - -	21	51	1,591	Exclusive of one Infantry Regiment at Russelcondah.
Ceded Districts and Divisions.	2	7	122	Ditto of miscellaneous Guards at Bellary, Kurnool, and Cuddapah.
Centre Division - -	8	36	1,166	Ditto, ditto at Vellore and Arcot.
Mysore Division - -	8	22	595	Ditto, ditto at Cannanore, Mangalore, &c.
Southern Division - -	10	23	573	Ditto, ditto at Trichinopoly and Palamcottah.
TOTAL - -	49	139	4,047	

21. CRIMINAL STATISTICS OMITTED.—Complete statistics of crime in the Presidency cannot yet be furnished from the police department for the official year under review. In 13 out of 20 districts, the police occupation has only been progressive during the year; and in eight districts, it is still incomplete. Criminal statistics of two-thirds of the Presidency could therefore only be fragmentary. A system of registering crime as it occurs, together with the operations of the police and final result of prosecution, has now been established in all districts, and will secure reliable and accurate data for the future. The general results of the year in respect of crime may be summed up in the words of the Deputy Inspector General of Ceded Districts range: "Preventive power has been obtained, and is increasing. Detection is still very defective, though the number of criminals convicted shows a fair average amount of success. At all points, progress (in some districts feeble) is being made, and when there is continuous progress, there is every hope in regard to ultimate efficiency." Crime has unquestionably altered in character and atrocity in several districts. Offences are reported with great accuracy and certainty. The worst is now known. An increase of crime under several of the minor heads, as petty highway robberies, petty burglaries and theft, now shown by the returns is, there is reason to believe, apparent only: for the constable on his daily beat picks up intelligence of the theft of a few handfuls of grain during the preceding night, and reports it—a matter which never was brought to the notice of the magistrate under the former system.

22. SEASON AND PRICES.—The season proved peculiarly unfavourable, and was one in a succession of bad years. The pressure on the poor has been very great in consequence of the high price of every necessary of life; and the cessation of railway and other important works added to the usual sources of crime in several districts.

THE NORTHERN RANGE.

23. Consists of the four districts of Ganjam, Vizagapatam, Godavery and Kistna. Police operations commenced in each of these districts on the dates entered in the margin. The Deputy Inspector General reports favourably of the progress hitherto made in each district, and the Inspector General has recently completed a gratifying tour of inspection. The district work is proceeding steadily and effectively, and with the cordial co-operation of the district officers. In each of these districts the Sibbandi Corps, already reduced and amalgamated with the police, are maintained as armed reserves in full military efficiency.

	Date of Commencement.
Ganjam - -	- 4th January 1861.
Vizagapatam -	- 28th do. –
Godavery -	- 15th June - –
Kistna - -	- 6th September –

Sibbandi Corps.	Former Strength.	Armed Reserve.
Ganjam - -	659	346
Vizagapatam -	357	207
Godavery - -	237	118
Kistna - -	249	118

The Deputy Inspector General, Captain Tennant, has been most active and judicious in the management of his range, and the officers subordinate to him have shown great tact, energy, and determination, in the manner in which they have met the peculiar and irksome difficulties and obstacles with which they have had to contend.

The district of Ganjam is in a backward state. Vizagapatam, which is a zemindari district, presented great difficulties in the nature of the country and the character of the population. In both these districts the climate is unhealthy. In the Godavery district also the past season has been particularly sickly, and recruits for the police are not attracted by a rate of pay which is decidedly too low as compared with the wages of the country.

Notwithstanding these obstacles, in Ganjam five out of the eight taluks, and in Vizagapatam the whole of the district, with the exception of Jeypore, have been occupied by the

Deputy Inspector General:
Captain Tennant.
Superintendents:
Lieutenant Stuart.
Captain Buck.
" Bloomfield.
" Sims.
Assistant Superintendents:
Captain J. D'Arcy.
Lieut. Cosmo Gordon.
" Robertson.
" Frazer.

police force. More than half of the Godavery district has been occupied, and most of the miscellaneous duties, such as gaol, treasury, and commissariat guards, have been undertaken. Although in the Kistna district the operations commenced late in the year, the district officers had succeeded in raising nearly the entire force before its close. Three out of 13 taluks were actually occupied, and the two gaols and treasury had come under charge of the police. The armed reserve at Juggiapet is in an effective state.

Arrangements were completed before the close of the year for undertaking the duty of the Orissa agency in the tracts attached to the Ganjam district by the regular police force.

The physique of the police force in the northern range is good, and much care has been devoted to their health, training, and general instruction. Grave crime has not been of frequent occurrence in the portions of this range occupied by the police.

THE WESTERN RANGE.

Canara.
North Malabar.
South Malabar.
Coimbatore.

24. Consists of the four districts noted marginally. North Canara having been transferred to the Bombay Presidency, mention of that district will be omitted.

Deputy Inspector General; Captain W. S. Drever.
Superintendents: Captain Hankin.
" Bloomfield.
" Menzies.
" Weldon.
Assistant Superintendents: Lieutenant Campbell.
" Balmer.

25. The exertions of the Deputy Inspector General, Captain W. S. Drever, have been steady and stimulating; while system and method have been carefully introduced and improved by him. Much of his time was occupied with arranging the transfer of North Canara.

He has been ably assisted in his arduous duties by the superintendents and assistants of the districts within his range.

Canara and North Malabar have been entirely occupied by the police. The Coimbatore and South Malabar districts have been similarly occupied, with the exception of one taluk in each, and also excepting the gaol at Calicut in South Malabar, which had not been taken charge of when the official year closed.

In Canara crime, especially violent crime, has been very light, notwithstanding high prices. But few convictions have been obtained in court, although the superintendent has devoted much attention to this part of his duty. In North and South Malabar there has been little violent crime against property; but, as is usual, there has been a large proportion of murders and crimes of violence against the person. In North Malabar the amount of detection has been fair.

In South Malabar and Coimbatore the amount of detection of crime was creditable to the police force. In South Malabar 65 per cent., and in Coimbatore 75 per cent. of the persons arrested were convicted. In both North and South Malabar the police force, which is of good physique, fairly intelligent and respectable, is at present below its proper strength.

The Inspector General states that men cannot be got for the lower rates of pay, for no respectable man can possibly live on it in these expensive districts, and that the higher cost of living and the unhealthiness of the climate, in portions of these districts, render an increase of pay necessary in order to maintain a respectable police force.

CEDED DISTRICTS RANGE.

Bellary.
Cuddapah.
Kurnool.

Deputy Inspector General: Captain C. S. Hearn.
Superintendents: Major McMaster.
Captain Robinson.
" Bowen.
Assistant Superintendents: Lieutenant Hicks.
" Reid.
" Knyvett.

26. The general condition and prospects of this range, which comprises the three districts noted marginally are, perhaps, considering the difficulties that present themselves, the most satisfactory and promising of the Presidency. The progress of the police has, under its able officers, been steady and marked, and the eventual efficiency of the force seems certain. Its energy has been roused, and amongst the people a spirit of self-defence has been stimulated, and has checked the cowardly gang robberies which were for so long prevalent. The rewards offered by the Government for gallantry shown in defending home and property, have also produced most appreciable results. The exertions of the Deputy Inspector General, Captain C. S. Hearn, have been persistent and invigorating to the police, and his careful inspections have extended equally over his entire range, and have been carried into the out-lying taluks and villages, as well as into the head-quarter office of each of his districts.

In all the districts of this range the police has been supported by the hearty co-operation and cordial aid of the European magistracy, and the influence thus brought to bear on the sub-magistracy and village functionaries has been invaluable. The entire districts of Kurnool and Cuddapah have been occupied, and 12 out of 15 taluks have been taken up in Bellary. Throughout this range the physique of the force is of a superior order, and the progress which has been made in their instruction is very satisfactory. Notwithstanding an exceedingly unfavourable season there has been a decrease of grave crime. A moderate, but promising amount of success, has been achieved in the detection of crime; and in the Cuddapah district a large number of convictions in cases of gang robbery have been obtained. Several notorious and dreaded ruffians have fallen into the hands of the police. Of 95 persons convicted, 75 were sentenced to 14 years' imprisonment, and there is good reason to believe that some of the worst criminals of this district have been brought to justice.

Ceded Districts Range.

The decrease of violent crime in this portion of the Ceded Districts range is very remarkable. Such cases as have recently occurred have been of a petty nature, unattended by aggravating circumstances, and differing in all their characteristics from the bold and violent robberies formerly committed by organized gangs.

CENTRAL RANGE.

Nellore.
North Arcot.
South Arcot.
Madras.
Salem.

Deputy Inspector General:—
Captain G. Hearn.

Superintendents:—
Lieut. A. J. F. Gordon.
Captain Swanston.
" Hawkes.
" Cloeté.
" Hill.

Assistant Superintendents:—
Lieutenant Highmore.
Lieutenant Cloete.
" Cox.
" Baillie.

27. The occupation of all the five districts of this range had been completed (two taluks of Nellore excepted) before the commencement of the year. The work has, therefore, been one of consolidation. Improvement in the efficiency of the force has, on the whole, been progressive, under the vigilant watchfulness of the Deputy Inspector General, Captain G. Hearn, and the district officers. The results, however, are but moderate. Crime has not diminished, although less serious in character, nor has detection, on the whole, been successful. The confidence and hearty support of the magistracy seem but partially secured in several districts of the eastern range, and this has rendered more difficult the always arduous duties of the police officers. Unless the police are at first cordially received and cheerfully encouraged in a district, their success can only be moderate, and the material of the force, especially in the higher ranks, will remain below the average. In the districts of Nellore and South Arcot, great difficulty is felt in keeping up the strength of the force in every grade, and frequent resignations occurring in all grades show that the service is not popular or entered with confidence. The district superintendents have been pains-taking, active, and energetic; but they have not received from the officers of the magistracy that degree of co-operation and support which is essential to their success.

Progress has been made in North Arcot in consolidating the force and a better class of men is offering for the service. Crimes of violence, however, have not decreased; this is chiefly attributable to the exceedingly unfavourable season, and the difficult character of a part of the country. Detection is still unsatisfactory in this district, but, it is hoped, is improving. During the early part of the year the supervision of the superintendent was not satisfactory or systematic. Several of his taluks remained unvisited or wholly unknown to him; this has been rectified.

In the Madras and Salem districts, the police administration has been much more successful in all essential points. This improvement has been specially marked in the Salem district, which, in the report of the official year 1860-61, was described as in an unsatisfactory state; under the present superintendent, Captain Hill, this has altered, and the district is now one of the most effectively managed. The evil report of Salem for crime has not, however, passed away, and will not readily do so, but, on the whole, both the prevention and detection of crime have been fair and improving. The co-operation of the magistrate also has been cordial in this district, and the consideration of the courts most encouraging.

SOUTHERN RANGE.

Tanjore.
Trichinopoly.
Madura.
Tinnevelly.

Superintendents:
Captain Bates.
" Marsack.
" Mesham.
" Gompertz.

Assistant Superintendents:—
Lieut. Warlow.
" Coningham.
" Porteous.

28. Of the four districts, marginally noted, comprised within this range, the three first were completed before the commencement of the year under review. No deputy inspector general was appointed to this range, but it has been visited during the year by the inspector General and the Acting Inspector General.

Progress has been made by the district officers in the improvement of the condition of the force, and in completing their instruction; but they have had many difficulties to contend against, and the results in the prevention and detection of crime have not been as marked as could have been wished.

In Tanjore much of the indifferent material which crept in when the police was first organized has been eliminated, and improvement is manifest; still much remains to be done, and it is to be regretted that in so advanced a district as this is in many respects, grave crime should not have decreased, and that in its detection greater progress has not been made.

There has been the same comparative failure in both the prevention and detection of crime in Trichinopoly. Very few convictions have been secured, and a grave gang robbery which was committed in March last, in the Fort of Trichinopoly, remains undetected. In the Madura district crime occurs chiefly in the Ramnad Zemindari, and there has been more success in the prevention thereof than in its detection. The magistrate, however, considers that there is cause for reasonable satisfaction; 25 per cent. of the gang and highway robberies, were prosecuted to conviction.

In Tinnevelly peculiar difficulties and obstacles have met the introduction of a legitimate system of police administration. These have arisen chiefly from the hold which the ancient Hindu Kaveli system still retains, and the power and influence possessed by the subsidised maraver or robber races, under the name of village watchers. The Kavilgars numbering 10,000 of all grades, levy contributions throughout the country on the plea of protection, which they are the last to afford.

There is reason to fear that crime has been extensively compounded in this district, the people and even the sub-magistracy, looking to the irregular and illegal methods adopted by their Kavilgars for recovering property and procuring evidence, rather than to the sound and proper course of detection and judicious police administration. These serious difficulties are, however, being gradually overcome by the able and judicious district officers, to whom the magistracy have lent a cordial support. It is not, however, improbable that there may yet be a deliberate attempt on the part of the lawless races of this part of the country, to try their strength with the police, and that an outburst of the crimes peculiar to them may occur in parts of the district, which will for a time baffle the best efforts of the police and the magistracy; but this will only be temporary, and law and order will eventually prevail

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in Tinnevelly as elsewhere. One-half of the district has already been occupied, and a variety of miscellaneous duties are performed by the police. On the whole, the condition of the Tinnevelly police is more promising and hopeful than the Inspector General had dared to expect, considering the difficulties that surrounded its introduction. Tinnevelly and the other districts in this range, which have been described as much in want of improvement, are occupying the anxious attention of the Inspector General and the Deputy Inspector General.

The officers of the magistracy in this range have, as a general rule, lent a most useful and cordial support to the police. In the Tanjore District the relations between these authorities were for a time not altogether smooth, but they have now recovered a sounder tone.

W. Robinson, Esq.
Captain C. S. Hearn.

29. Inspector General.—The Inspector General made two tours during the year through the Northern Circars; and several districts of the Central Range were visited by him. The Acting Inspector General inspected the Southern Districts and part of the Western Range.

Northern Range—Captain T. E. Tennant.
Ceded District Range—Captain C. S. Hearn.
Central Range—Captain G. Hearn.
Western Range—Captain W. S. Drever.

30. Deputy Inspector General.—The usefulness of this grade of officers has been thoroughly proved during the year under review by the improving state of internal economy manifest throughout the force. Their instructions have been received by district officers in a proper spirit, and harmony has not been broken. The object had in view in instituting this grade in the service was to secure, by proper supervision and frequent inspection, substantial efficiency, and to maintain persistent activity throughout every part of each district. With this view the leisurely and methodical tours of Deputy Inspectors General are ordered to extend to as many of the outlying stations, and even villages, of each district as possible; they are not to be confined to visits to the district head quarters. They are to observe the feeling of the magistracy and people towards the police in all parts of their ranges, and adjust differences.

31. European District Officers.—The European officers of the force have, with scarcely an exception, carried on their toilsome task throughout the year with great ability, earnestness, and self-denial. The more heavily each has been taxed, as in the Ceded Districts, Northern Circars, and elsewhere, the more successful has been the struggle. Districts are getting more completely in hand, and the tours of European officers are becoming more methodical, stated, and slower. Many officers now proceed steadily and slowly through their districts, dividing their time equally over all parts. The tendency to rush about the country has lessened; and the periodical visits of inspection to each station are sufficiently prolonged to admit of carefully teaching the men their duty in detail, and of free and leisurely intercourse with the village magistrates and principal inhabitants. However, much still remains to be done in this regard. Officers can only become acquainted with, and gain the confidence of their men by moving leisurely and methodically amongst them. To secure and cultivate the good will of the people, officers must seek them out, explain and discuss their plans and objects, and learn and redress their grievances. "They must encourage them to speak their minds on all matters; must visit as many villages as possible with this object, and show the people that we consider them to be thoroughly associated with the police working of the country, that we look to the village communities to assist us at every point while we are doing our best to protect them." The people have to learn that the police is a municipal rather than an Imperial institution, that they are really far more interested in the efficiency, diligence, and accessibleness of each officer in it, than the Government: and they must be encouraged to expect much more from the police than before. This spirit will only be roused by the European officers communicating freely with the people.

THE FORCE.

32. Inspectors.—The police service, in districts which have already been for some time occupied, is steadily increasing in popularity. A better class of men are presenting themselves for employment in the grade of inspectors. They are taken freely from all classes, European, East Indians, and natives. Each class has its strong and weak points. A good inspector of police must be a man of no ordinary stamp; and he requires much instruction and training before he can really be efficient. But a judicious mixture is found the best policy, and affords in each district suitable material for the varied and peculiar requirements of the department. The inspectors have, as a body, worked well, honestly, and intelligently.

33. Head and Deputy Head Constables.—The same observations apply to the petty officers in charge of police stations. For these grades, men fit to command and work the police of a considerable range are required; and withal men possessing ability and intelligence for the detection and prosecution of crime. Of such there is a great paucity in the force. They must be brought up and trained in the department itself, as leisure and opportunity present themselves. But in most districts the material is improving, misapprehensions are giving way, and men who scorned the service a year ago, are now being more freely entertained. In this regard the schools of instruction are working very useful improvement.

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34. Constables.—Experience has shown that the wages of the constables, especially of the lowest class, are scarcely sufficient to secure the services of a decidedly superior order of men belonging to the working class of population. Wages and prices have risen permanently throughout the country in a degree that seriously affects the public service; for there are now fewer perquisites and safe means of illicit gain than formerly open to the police; while the work is unceasing and irksome. There is, notwithstanding, a marked improvement. The gradual elimination of the indifferent and lazy characters who joined the police service in its first stages, has decidedly raised its general tone: and the very much smaller number of casualties, arising from resignations, desertions, and dismissals, shows that the service is gradually consolidating itself, and is adopted by increasing numbers as a means of permanent livelihood. Offences of varied magnitude have occurred amongst the police in every district. They have been vigorously repressed by departmental punishments and criminal prosecutions; but the number of offences diminishes, and on the whole the men have behaved as well as can fairly be expected in all districts.

35. Village Police.—Nothing has been done during the year under review towards improving the material position of the now inefficient village or municipal police institution. It continues to be, as regards funds, practically beyond the protection of the law. But in most districts the co-operation of the village police has been sought for in another direction, and not altogether in vain. The magistrates are now, very generally, insisting on the potails or village magistrates becoming recognised as coadjutors of the police. They enforce their responsibilities as a local magistracy for the prevention and detection of crime in general. The constabulary is already in several districts, in close and almost daily communication with these village authorities, whose weight and unlimited means of information secure to the police an influence and local knowledge which are found to be invaluable. The village police, so far as it exists, is at the disposal of the village magistracy for village purposes, and to aid the constabulary in detecting offences. An increasing feeling of confidence will, it is hoped, spring up, as the people observe that the practical support, influence, and authority of the magistracy of all grades are exercised in the same direction, and when they learn that the constabulary officers seek the aid of and exercise a control over their municipal police only to stimulate their watchfulness and use their local intelligence to rid their neighbourhood of evil-doers. The district police officers and magistracy are equally realising that this is the keystone of efficient police administration, and in general co-operate heartily. Remarkable results have been produced, especially in the Ceded Districts, from the constant personal communication between the European police officers and the village authorities and inhabitants. The object to be kept in view is to strengthen and utilise to the utmost existing municipal institutions, without attempting to centralise or interfere with these social arrangements of the country in such a manner as to separate them in spirit or management from the people. Legislation is still urgently required to enforce the trust which the common law of the country imposes on the people in regard to their municipal establishments, and to secure to the village watchers those legitimate dues without which they cannot work, and in the absence of which they everywhere take to petty pilfering in self defence.

GENERAL OBSERVATIONS.

36. Progress in introducing System and Method.—Steady progress has been made during the year under review in introducing method and system throughout the various branches of the establishment.

37. In Chief Office.—In the chief office at Madras, correspondence has been simplified, and the necessity of reference to the Inspector General on minor points reduced; while the accuracy and prompt transmission of all important intelligence has been increased.

38. Account and Audit.—The system of financial account, check, and audit laid down by Government has been carried out with success. Each individual of a force of 23,000 to 25,000 men receives his wages within, on the average, a week or 10 days after they fall due; and, before the close of the official year, the adjustment of advances was on the average effected by the Collectors within three months of their being made.

39. Clothing and Stores.—Clothing and stores are being supplied by contract, of better quality, and with greater punctuality.

Head Quarter Office, Police Schools.

40. In Districts.—In the districts, with the aid of the Deputy Inspectors General, regularity and system are progressing. The Head Quarter Office has, in most districts, been placed on an improving and efficient footing for the punctual and methodical transaction of business. Police schools have been established in each district for teaching men of all ranks their duty, and increased attention is paid to the all-important matter of thorough professional training and instruction. Promotion by a system of frequent examination has stimulated professional study and eagerness for instruction.

41. Courts.—In most districts a really intelligent police officer aids the public prosecutor at the final trial of prisoners; and is at hand to take the instructions of the judge or magistrate in regard to producing links of evidence which are missing, either through the inadvertence of the committing magistracy or ignorance of the police; and otherwise to expedite the course of justice under the orders of the court.

42. Observing and Reporting Crime.—The system of observing, reporting, and registering all crimes and occurrences affecting the public peace with certainty and accuracy, of communicating them to the magistracy, and of keeping cases alive until offenders are brought to justice, is gradually and progressively extending throughout all parts of the force. Few crimes now pass unnoticed; however many the motives for suppression, however out-of-the-way the scene of the occurrence. Numerical returns of offences are swelled by this accuracy; cases, trivial in their character, as snatching a cloth from a wayfarer, the robbery of a sheep by a travelling party of Lambadies, the theft of a little grain by a talari who has been defrauded of his fees, appear in the statements under the head of the gravest offences. But it is right that the worst should be known; and the most vigilant watch is maintained to ensure accuracy in this regard. Arrangements were at once made for carrying out cordially and in the spirit of the Legislature the recent changes in the police law. They are working well.

43. Patrol and Watch.—The active patrol of the streets in towns and of ghauts and highways in rural districts, and frequent communication with the villagers by regular constabulary are enforced with, it is hoped, increasing success and punctuality. Difficulties present themselves. Time and great vigilance in supervision are required to create and keep in persistent and methodical working an effective, steady, observant police patrol.

44. Relation of Magistracy towards the Police.—In this there has been steady and very marked improvement. The co-operation and support afforded to the police by the European magistracy is, in almost all districts, most encouraging. They have generally given every assistance, and shown a cordial determination to support the force in the legitimate exercise of its duty in every way in their power. The native submagistracy, taking, in increasing numbers, the spirit of their conduct towards the police from their European superiors, aid and guide their operations often with good will and intelligence. The magistracy of all grades and constabulary force are, in short, mutually feeling more fully that they are both part and parcel of the same organization for the administration of peace and justice within their respective ranges. The recent alteration of the law has unquestionably weakened the direct control of the European magistracy over their subordinates in the administration of criminal justice. The former are therefore necessarily becoming more dependent on the police placed at their disposal, both for speedy intelligence of what occurs in their district, and for information in regard to the working of the subordinate judicial magistracy in criminal cases. In proportion as the police becomes more efficient, this need of mutual aid will lead to increasing confidence and improved relations. Instances of undue want of consideration and confidence in the officers appointed by the Government for the supervision and management of the police have occurred in some districts. Complaints, sometimes false and frivolous, against the police have been taken up and investigated by the magisterial officers, European and native, without notice to the superintendent. Superior officers of police have been arrested under warrant, and entire parties of police have been summoned from their stations without communication with their superintendent, and without opportunity being given to supply their place. Such occurrences are wholly subversive of sound administration and departmental subordination; but the instances have been few, and the practice is confined to two or three districts. In most, a more judicious course is followed, and the officers of the police are required to investigate, in the first instance, and prepare for judicial trial when necessary, all cases affecting the conduct of their subordinates. There is no doubt that, practically speaking, the character and usefulness of the police, the place it holds in the esteem of the people, and the aid it receives from the public, depend, as yet, quite as much on the consideration and treatment the force receives at the hands of the district magistracy at whose disposal they are placed, as on the police officers who supervise its internal economy.

Prevention.

45. Crime.—A gradual improvement in the efficiency of the police of several districts in preventing crime is clearly perceptible, and affords grounds of confidence for the future. This progress is most apparent where the strength of the police has been most severely tested—for instance, in Bellary, Cuddapah, and Nellore. In the two former districts the lawless part of the population resolutely tried their strength with the constabulary on its first introduction, and the police may fairly be said to have got the upper hand. The outbreak of violent crime was effectively repressed, and has not recurred. A change is perceptible too in the character of crime in several districts. The frequency of the bold, lawless, torchlight, midnight dacoity by large and organized bands has abated, and the members of the broken-up gangs take to the less heinous crime of petty highway robbery.

Prosecution.

The successful detection and prosecution of crime require a far higher degree of professional ability, skill, and acquirement than can as yet be looked for in a force rapidly brought together and formed of the most heterogeneous and often hopeless elements. In the early stages of the organization of such a force, the material that presents itself must be accepted, and instruction, and the elimination of unlikely characters be trusted to for bringing it into shape. The natural aptitude, steady patience, unwearied diligence, ready resource, the quiet persistent determination of the true detective are rarely met with; and when possessed, require experience and much practice to develope them. These the constabulary has not had; and detection is very imperfect in every district. Efficiency in this duty will be of very slow growth. The instruction of his men is, however, engaging the anxious attention of every officer in the department. The difficulties encountered in seeking

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seeking to establish a system of detection in which illegal modes of obtaining evidence are neither tolerated nor practised, are very great in India. Utterly erroneous ideas on the subject prevail, not only amongst the police, but amongst the native magistracy and people. All look to the prisoner for evidence against himself; and prosecutors will scarcely come forward, so distrustful are they of the possibility of detection, wherever the police take no means to secure a confession. These irregularities, the pernicious habit of indiscriminate arrest, and many others have to be checked with a determination and severity that sometimes paralyses the exertions of men uninstructed and unskilled in sound methods of following up criminals and unaccustomed to look for the proper sources of information. An ignorant police and unskilled native magistracy mismanage the first steps in detecting offences. Added to these obstacles, the apathy of the people in submitting to the oppression of evil doers, the unwillingness of prosecutors and witnesses to leave their homes and occupations to attend, unremunerated, at distant courts, or to expose themselves to the vengeance of criminals whose acquittal they are too apt to anticipate as certain; the venality of both prosecutors and witnesses, the admixture of falsehood that exists in the evidence of every native witness, still further increase the difficulty with which convictions are obtained in courts of justice. Officers are alive to these difficulties; irregularities are vigorously repressed; the progress of cases through the sub-magistrate's and other courts is carefully watched and managed, not unfrequently by the European officers themselves; any irregularity of the police, as shown in the course of trials, is promptly reported by the inspector in attendance at the court; and every endeavour is made to comfort and encourage the injured to prosecute offenders and to give the officers of the police the means of vindicating justice.

46. Gaols.—The increase in the number of convicts in the gaols of most districts, beyond the average of three years taken in the estimates, is probably attributable to the success of the police in securing and prosecuting offenders. The stalwart appearance of the men gives reason to believe that the worst criminals are being brought to justice.

47. Station Houses and Huts.—Very little was done during the year under review in the all important matter of providing station houses and lodging for the men of the force. But arrangements have now been made for rapidly placing the men at the different stations under such suitable shelter as shall enable them to have their families with them, and live respectable lives.

PRESIDENCY TOWN POLICE.

48. The six statements included in Appendix, exhibit the state of crime and the operations of the police in the city of Madras during the year 1861. Four returns are added, containing information connected with the department.

Statement (*A*) shows the number of cases committed for trial at the criminal sessions, and those from (*B*) to (*E*), inclusive, exhibit the number summarily disposed of by the magistrate.

(*F*) is a general comparative statement including the total number of cases, and showing the increase and decrease in each description of offence, as contrasted with the preceding year.

In 1860 there were 22,211 cases, and 25,526 persons.
In 1861 there were 20,304 cases, and 24,282 persons.
Being a decrease of 1,907 cases, and 1,244 persons.

The number of offences of a serious nature committed during the past year is very nearly the same as it was in 1860, but the proportion of convictions is considerably greater.

	Cases.	Persons.	Convictions.
1860	122	168	71
1861	117	178	114

Of the three murders, one took place in December 1860, but the prisoner was not tried until the month of January 1861. The other two were committed by sepoys. One was a case in which a native officer of sappers was deliberately shot on parade by a private of the same corps, out of revenge for some supposed injury connected with his promotion. The other instance was that of a private of the 4th regiment native infantry, who shot his wife from motives of jealousy. All three prisoners were convicted and hanged.

49. The number of larcenies exceeds that reported in 1860, but the total value of the property stolen is less, and the increase in number is not so great in reality as it appears to be; many persons found in possession of property recently stolen having been prosecuted and convicted of larceny, whereas it was generally the practice to charge such persons with being in possession of stolen property, under which head it will be observed there is a considerable decrease.

1860	*Rs.* 38,265
1861	35,643

	Cases.	Persons.
1860	222	275
1861	87	97

The increase in the number of petty larcenies not thus accounted for may be principally attributed to the high prices of the necessaries of life.

50. In 1860, which was justly considered as being a dear season, rice of the third sort was sold at the average rate of 10 measures and 5⅙ ollocks per rupee throughout the year; but in 1861 the same description of rice was sold at 8 measures and 2 ollocks per rupee; and other articles of food were dear in proportion.

Statement (*G*) shows the amount realised on account of penalties, summons and license fees, rent of ground belonging to Government, and sales of unclaimed property.

(*H*) is the Report of the Penitentiary for the past year.

Statement (*I*) is the Coroner's Return, showing that 170 inquests were held in 1861, being seven more than in 1860.

GAOLS.

Prison for Europeans at Ootacamund.

51. The Inspector General of Gaols reports the completion of the new prison for Europeans and Americans, sentenced under Act XXIV. of 1855. The building was occupied on the 31st March, when 28 prisoners from the Calcutta prisons, one from Madras, and one prisoner claiming to be an American, and sentenced by the local courts, were received into it. The establishment consists of a keeper, one head warder, and four warders, besides a native cook, messenger, and a scavenger.

Gaol discipline.

52. The system of gaol discipline has been assimilated to that of the modern English prisons; but in respect of the prisoners now received and who had already undergone a considerable portion of their sentence in the Presidency prisons, it was not thought desirable to enforce the strictly separate system for a longer period than three months in ordinary cases.

Dietary.

53. The dietary has been based on that in use at Pentonville, and though complained of by some of the prisoners, is considered sufficient by a medical man of considerable experience, who temporarily took charge of the gaol after the prisoners had been there two months.

The cost of rations has not exceeded 10 rupees, for each prisoner, by the month.

Religious wants of European prisoners.

54. The spiritual wants of the prisoners had been provided for, in the rules, by placing them under the pastoral charge of the chaplain or other clergyman specially appointed to the duty; but as the chaplain of Ootacamund is much over-worked, the duty was undertaken for a time by the Archdeacon, who happened to be on the Hills on leave when these convicts arrived. It has now been entrusted to a resident clergyman, the Rev. G. U. Pope. The conduct of all the prisoners has been good.

Health of prisoners.

55. The health of several of the prisoners has been reported indifferent, and, as often happens on a sudden change to the climate of the Neilgherries, there have been several cases of bowel complaint. The medical officer considered that want of exercise was a cause of indisposition, but his return shows that many of the cases are due to the former habits of the individual rather than to climate.

Prison labour.

56. There has been considerable delay in providing means of employment for the prisoners. Such work as they have done has been well and cheerfully performed. Several have shown skill in mat-making, saddlery, and shoe-maker's work. It is intended that they shall be worked entirely within the prison walls, but the building of the workshops has been necessarily delayed pending the completion of a well which is being sunk, and which owing to the nature of the soil is a difficult and tedious work.

Number of prisoners in all gaols during the year.

57. The number of prisoners in all the gaols at the commencement and close of the official year was:—

	Remaining on the 1st May 1861.		Remaining on the 30th April 1862.	
	Males.	Females.	Males.	Females.
Convicts	5,330	171	6,177	239
In default of security	286	8	310	9
State prisoners	29	—	29	—
Insane criminals	9	1	9	1
Insane under treatment	18	2	21	2
Under trial	414	16	296	20
Debtors	132	8	133	7
Total	6,218	206	6,975	278

58. These figures show that there has been a considerable increase in the number of prisoners in confinement during the year under review. The Inspector-general states that while the number of prisoners actually confined exceeds 7,000, the amount of accommodation available is barely sufficient for 5,000, and he anticipates that the system which has recently been introduced of holding monthly sessions instead of trying each case as it comes

in will lead to further overcrowding of the gaols. It is clear that the amount of prison accommodation must be largely increased. Estimates have already been called for, for the erection of new prisons at Berhampore, Vizagapatam, Coimbatore, and Madura, and the Inspector General has been directed to report what other new gaols he would propose to build.

Mortality.
Prison at Vizagapatam.
Prison at Calicut.
Prison at Madura.
Prison at Cannanore.
Prison at Tellicherry.

59. The mortality among the prisoners during the past year has been unusually high, being very nearly 10 per cent. on the average of all the gaols. It has been highest in the formerly healthy, but badly situated, prison at Vizagapatam. At Calicut it has been unusually high (24·4 per cent. on the daily average number confined). In the unhealthy building used as a prison at Madura, it has amounted to 15·7 per cent. The same proportion of deaths occurred at Cannanore, to which place a gang of convicts from Tellicherry is supplied. At Tellicherry itself, where the mortality has hitherto been far below the average, it has amounted to 30, during the year, on an average daily strength of 13 prisoners.

Prison at Honore.
Prison at Guindy.
Prison at Cuddalore.
Prison at Combaconum.

In the hitherto healthy station of Honore, a place in which it was lately reported tnat cholera was unknown, the deaths have amounted to 21, on an average strength of 148 prisoners, six of the deaths being from cholera, and four from diarrhœa. At Guindy the deaths have exceeded 14 per cent., while the ratio of mortality at Cuddalore, the gaol at which place used to be healthy, has exceeded nine per cent.; and nearly the same result is shown on the returns from the continuously unhealthy prison at Combaconum, though the numbers there have been so reduced that there is no longer the plea of the gaol being crowded. In nine other prisons the mortality has exceeded six per cent.

Prison at Cochin.
Prison at Guntoor.
Prison at Nellore, Vellore, Chingleput, and Salem.

On the other hand, there has been no death in the gaols of Cochin, or in the formerly unhealthy prison at Itchapore. In the Guntoor gaol the deaths amount to four per cent. on the average strength, the ordinary mortality being thus doubled. At Nellore, Vellore, Chingleput, and at the new gaol established at Salem, the deaths have somewhat exceeded two per cent. At Salem, it will be remembered, they used to exceed 18, and have amounted to 30 per cent.

Cholera in gaols.

60. Cholera has prevailed at a great number of gaols. The type of the disease seems to have been most formidable at Vizagapatam, Calicut, Tellicherry, and Cannanore, and it is remarkable that at the two last named stations, hitherto comparatively exempt, 18 died out of 20 attacked by the disease. The gaols of Coimbatore and Madura have been unhealthy, which their situation would in part account for, while the gaol at Calicut has been remarkable for the spread of any epidemic when once introduced. In the new Salem gaol, there has not been a single death from cholera.

In the Vizagapatam and Calicut gaols, not only cholera has proved very fatal, but the deaths from fevers, diarrhœa, dysentery, atrophy, and anasarca, certain types of an unhealthy prison, have been numerous.

The prison attached to the Sudder Ameen's Court at Itchapore has been abolished; it proved in former years unhealthy, and was not under sufficient control. It was not needed for cases properly within the cognizance of the officer in charge, and was expensive in its establishment, including as it did an apothecary of the first class. The prisoners were removed in November to the gaols at Chicacole and Vizagapatam, which had not then been reported unhealthy.

Zillah gaols' expenditure.

61. In the statement of expenses of the several gaols, considerable difference in the cost will be observed; this is, in respect to diet, attributable to the difference of prices, and to the introduction in many of the prisons of the lower priced, but more nutritious grains, which are not always procurable. Thus at Bellary the cost of dieting was at the rate of *Rs.* 18. 5. 2. for each man; while at Tellicherry, Guindy and Chingleput it exceeds 37 rupees. This variation arises partly from the difference of prices in several districts, and from certain articles being included in ordinary diet in some gaols, whereas in others they are regarded as medical extras.

Clothing.

62. The great variation in the column of cost of clothing may be, to some extent, explained, from the necessity of purchasing before the time of issue, and the difference in quality of blankets procurable in different districts. In some, the blankets will last two, in others only one year. There is also a great difference in the cost price of cloth in the several districts. In the charges for lighting there are great differences not altogether attributable to the various prices or numbers of lights required.

Medical comforts.

63. In regard to charges for articles, not of diet, on medical requisition, these have, as stated above, in some instances included medical comforts, which, strictly, might be regarded as articles of diet. In other cases wine and other European stimulants have been purchased, but in general the charges under this head have been small; hitherto these charges have not appeared in the prisons' accounts, having till last year been incurred by the Commissariat.

The charge for extra guards has been gradually diminishing as the new police have undertaken the guarding of the gaols: a separate table shows the police force employed in guarding gaols, and its cost for the month of February, being the latest for which a complete return had been received.

Complete returns have not been received of the manufactures in the different gaols. The want of space in the gaol enclosures, and the inexpediency of adding, at considerable cost, to buildings which are condemned; the high price of raw material, and want of demand for manufactured produce, have prevented any great extension of manufactures in gaols. It has repeatedly happened that an article, superior in quality to that made in the villages, cannot be sold for the prime cost of the raw material; and the profitable productions have been those which are purchased directly by English residents for domestic use. Gunny-making at Rajahmundry, rope-making at Masulipatam, paper-making at several gaols, rattan work at Salem, have been abandoned, either from the excessive cost of raw material or from want of demand for the finished article.

Total cost of gaols.

64. The total cost of all the gaols, exclusive of the European prison and of police guards, has been 2,98,144 rupees. The principal measure for reducing the expenditure of the prisons would, in the Inspector General's view, be the establishment of central prisons at zillah stations, the confinement of the prisoners to the prison enclosures, and their employment in work required by Government in its several departments, the extra expenses attending the employment of prisoners on the station roads being in general very inadequately met by the work performed. A statement is appended, exhibiting in detail the various kinds of labour upon which the convicts throughout the Presidency have been employed.

Escapes.

65. There were eight escapes during the year, as detailed in the Appendix. In five instances the prisoners were re-apprehended; in one instance the prisoner's escape was owing to most culpable disregard of orders by the prisons' officers, and in one to the connivance of the guards.

REVENUE.

66. Season.—As compared with 1860-61, the season was generally more favourable; but it varied greatly in different parts of the Presidency, and as a general rule was not a good one.

On the eastern coast, the two extreme northern districts which receive the south-west monsoon enjoyed seasonable and sufficient rains. In the Godadery district, heavy floods in July and August destroyed much stock and cultivation, and did great damage. A timely fall of rain in November was of great service to the crops in this and the adjoining Kistna district, in which last the early rains had failed. Further south, in Nellore, there was a fair early fall of rain, but subsequently a deficiency; and the crops suffered to a considerable extent. The season was still worse in the adjoining district of Madras. In South Arcot an improvement was manifested. The rains, though capricious, were seasonable. In Tanjore the season was on the whole decidedly favourable, though serious fears were entertained at one time. A timely fall of rain in January averted the danger. In Madura the season was similar, but the later rain was not so copious as in Tanjore, and there was a considerable extent of loss. Tinnevelly was saved from disastrous results, which were at one time greatly feared, by the January rain.

On the west coast, the season was favourable on the whole, though the rain-fall was scanty at the latter part of the monsoon.

In the inland district, Kurnool, which is the most northerly, enjoyed a good season. In Bellary there was a partial, in Cuddapah an extensive failure of rain. North Arcot suffered extensively. In Salem the season, though bad, was better than that which preceded it. In Trichinopoly it was favourable. In Coimbatore it was disastrous; in parts of the districts the people in the latter part of the season were compelled to proceed to considerable distances to purchase drinking water, and but for the liberal policy of late years, which has so greatly encouraged the formation of wells, the distress would have been general and aggravated.

67. Public Health.—Notwithstanding the unfavourable season, as above described, the public health was in most parts unusually good, although severe visitations of cholera occurred in some localities, and small-pox prevailed to a considerable extent. Cattle suffered from want of pasture.

68. Prices.—Prices continued to rise, and are now very largely in excess of the averages of past years. High prices have pressed heavily on the poorer classes; but labour is greatly in demand, and employment is steady, so that there is ground to believe that absolute distress was not experienced in general. The great demand for labour, and large expenditure in wages created by the Railway and Irrigation Company's works, are of incalculable benefit to the people in seasons such as these.

Items.	1857–58.	1858–59.	1859-60.	1860–61.	1861–62.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Rice, 2d sort, per garce - -	257	320	296	307	333
Paddy, 2d - ditto - - -	116	141	130	138	151
Cholum - - ditto - - -	147	180	157	164	186
Cumboo - - ditto - - -	140	168	151	158	167
Raggy - - ditto - - -	136	162	152	160	172
Varagoo - - ditto - - -	102	123	111	110	133
Wheat - - ditto - - -	317	353	380	425	442

69. **Emigration.**—The number of emigrants from the southern districts to Ceylon has increased to some extent by the deficient harvest, and dearness of food.

	1860-61.	1861-62.
Tanjore - -	1,699	708
Madura - -	26,883	32,326
Tinnevelly - -	15,253	12,691

70. **Trade.**—Trade fluctuated, and at some ports the tendency to rise was owing in part, it would seem, to the transfer of trade from the French ports to our own, a change in the French customs regulations having lessened the inducements formerly held out to exporters from the former.

71. **General Revenue.**—The following abstract statement exhibits a progressive increase in the collections of revenue from all sources in this Presidency, in each of the last five years. The total revenue has steadily increased between 1857–58, and the past year 1861–62, from 4,813,371 *l.* to 6,083,883 *l.*, the increase in last year over that which preceded it being 421,218 *l.*

ITEMS.	1857-58.	1858-59.	1859-60.	1860-61.	1861-62.	Per Centage.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Land Revenue -	3,61,81,771	4,15,20,294	4,08,14,800	4,03,99,389	4,14,18,879	68·0
SUNDRY SOURCES:						
Abkarry, or tax on spirituous liquors -	27,37,858	28,33,591	29,28,240	30,72,921	33,28,807	5·5
Salt - - -	56,92,310	60,24,313	64,58,763	70,60,770	86,01,418	14·2
Sea-customs - -	12,80,291	13,91,409	23,55,639	27,01,861	21,35,384	3·5
Moturpha, or tax on professions, &c. -	10,51,534	11,03,253	10,94,734	10,08,339	3,11,514	·6
Stamp Revenue -	7,50,737	8,07,179	8,58,008	13,95,972	29,54,576	4·9
Frontier Customs -	1,93,806	1,96,062	2,39,637	2,87,419	2,71,484	·4
Income Tax - -	- - -	- - -	- - -	5,42,914	16,93,791	2·7
TOTAL Sundry Sources -	1,17,06,536	1,23,55,807	1,39,35,021	1,60,70,196	1,92,96,974	31·8
Extra Revenue, including interest account - -	2,45,410	2,20,150	2,87,993	1,57,069	1,22,985	·2
Grand TOTAL - -	4,81,33,717	5,40,96,251	5,50,37,814	5,66,26,654	6,08,38,838	100
Sterling - - £.	4,813,371	5,409,625	5,503,781	5,662,665	6,083,883	—

72. **Area under Cultivation.**—It is a satisfactory evidence of the wise policy that has dictated the administration of our land revenue of recent years, that in the face of a series of diastrous seasons, and of increased taxation, we can, in so unfavourable a year, point to a net extension in the area of cultivation, amounting to nearly half a million of acres, exclusive of the districts of Canara and Malabar, and representing an assessment of about eight lacs of rupees or 80,000 *l.* The increase occurs in every district except Coimbatore, in which, by reason of the extremely unfavourable character of the season, a considerable extent of land (1,23,720 acres) was thrown up, and the gross increase largely reduced. The increase is largest in the dry cultivation, but is considerable in the wet. It is found mainly in the districts marginally noted, which are ranked according to its proportionate extent in each. The corresponding increase of assessment is principally in the districts in the margin, which are ranked on the same principle.

Bellary.
Tinnevelly.
Trichinopoly.
South Arcot.
Kurnool.
Tanjore.

Tinnevelly.
Tanjore.
Kistna.
Trichinopoly.
Salem.
Kurnool.

The large increase in Tinnevelly (2,59,472 rupees) is gratifying, as resulting from the extensive relief given to the ryots in the abandonment of the Ulungu system which was explained in last year's report, by which change the whole additional profit from high prices for produce goes to the landholder.

73. **Land Revenue.**—There was a net increase of 10,19,490 rupees, or 101,949 *l.*, in the revenue from land, resulting from a gross increase of 21,08,139 rupees, or 210,813 *l.*, against a gross decrease of 10,88,649 rupees, or 108,864 *l.* The increase is mainly due to greater punctuality in payment, the high prices having placed the ryots in easy circumstances, and partly to increased cultivation. The decrease is accounted for by the small amount of arrears outstanding at the commencement of the year, and by the failure of the Coimbatore harvest.

1860-61 -	*Rs.*	4,03,99,389
	£.	4,039,938
1861-62 -	*Rs.*	4,14,18,879
	£.	4,141,887

The amount of land revenue realised by coercive process was 12,849 rupees.

1860-61 - - *Rs.* 30,72,921
£. 307,292
1861-62 - - *Rs.* 33,28,807
£. - 332,880

74. Abkarry Revenue, or Tax on Spirituous Liquors.—The revenue under this head shows an increase of 2,55,886 rupees, or 25,588 *l.*, resulting from the sale of the leases of some of the districts which fell in during the year for higher rents than were obtained on the last occasion. The districts are leased by auction for terms of five years, the Presidency town excepted. This town is under the direct management of the Collector through licensed retailers. The Commissariat rent the Abkarry of a few military stations. The Customs duty on imported liquors is not included under this head, but under that of Sea Customs.

1860-61 - - *Rs.* 70,60,770
£. - 706,077
1861-62 - - *Rs.* 86,01,418
£. - 860,141
1860-61 - In *Mds.* 60,74,763
Lbs. 499,866,213
1861-62 - In *Mds.* 57,86,964
Lbs. 476,184,466

75. Salt.—Shows an increase of 15,40,648 rupees, or 154,064 *l.* It is matter for regret that in this instance the increase of revenue is accompanied by a decrease in the consumption of this necessary of life. The sales for inland and home consumption in the last and preceding years were as shown in the margin.

In April 1861, the Government selling price was raised from *Rs.* 1. 2. to *Rs.* 1. 6. per Indian maund. On the 24th June 1861, this price was raised to *Rs.* 1. 8., or in English money ·4375th of a penny per pound. This falling off in the sales has been attributed in a great measure to the increase in the Government selling price, but further experience is necessary before the effect of the present high price on consumption can be satisfactorily determined.

The facilities afforded by the railroad for the carriage of salt into the interior have had a marked effect on the Madras sales, which show an increase of 5,07,480 rupees, or 50,748 *l.* The quantity so conveyed was 6,34,886 Indian maunds, or 23,322 tons, being an increase of 98,963 Indian maunds, or 3,635 tons over the preceding year. Near the western terminus of the railroad the sale of Government salt is checked by the free importation of salt through the territory of the Cochin Sirkar. The subject is now under the consideration of Government. The manufacture of earth salt in the inland districts of Bellary and Cuddapah, which was hitherto taxed under the Moturpha, has been rendered free by the abolition of that tax, and the subsequent relinquishment of the trades duty. This article has probably now some slight effect in limiting the consumption of sea salt in the adjoining coast districts, and measures are in contemplation for taxing the manufacture, so as to put the produce on a fair footing with the manufacture under the Government monopoly. Proposals for connecting the salt swamps at Vadarniem in the Tanjore district, where an excellent article is almost spontaneously produced in large quantities at a very cheap rate, with the line of rail from Negapatam to the interior, are under consideration of Government.

1860-61 - - *Rs.* 27,01,861
£. 270,186
1861-62 - - *Rs.* 21,35,384
£. 213,538

76. Sea Customs.—There is a falling off in the Revenue from Sea Customs to the extent of 5,66,477 rupees, or 56,647 *l.*, due principally to a falling off in the import trade of the port of Madras, and to a diminution in both the exports and imports of the Tanjore district. There was a considerable increase in the declared value of both imports and exports, as will be seen from the annexed statement of the foreign trade of the whole Presidency for the last 11 years. The coasting trade is free, and is not included in the valuation:—

YEARS.	VALUE OF IMPORTS.			VALUE OF EXPORTS.			Value of Re-exports.	Gross Duty.
	Merchandise.	Treasure.	Total.	Merchandise.	Treasure.	Total.	Merchandise.	
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1851–52 - - - -	1,34,23,536	61,79,148	1,96,02,684	2,49,65,225	88,54,659	3,38,19,884	5,96,000	9,41,845
1852–53 - - - -	1,32,77,606	1,08,78,112	2,41,55,718	3,28,50,486	41,32,943	3,69,83,429	6,09,212	9,70,265
1853–54 - - - -	1,63,52,337	1,10,60,291	2,74,12,628	2,99,77,350	1,06,94,826	4,06,72,176	7,81,096	10,26,203
1854–55 - - - -	1,91,24,962	64,81,955	2,56,06,917	2,39,48,083	81,00,456	3,20,48,539	7,17,474	10,02,863
1855-56 - - - -	2,31,33,876	1,37,16,696	3,68,50,572	2,91,70,905	44,18,750	3,35,89,655	6,64,364	11,89,972
1856–57 - - - -	2,35,25,244	1,70,38,582	4,05,63,826	3,67,26,978	33,33,678	4,00,60,656	7,78,134	12,52,487
1857–58 - - - -	2,46,85,453	1,86,23,162	4,33,08,615	4,03,65,161	1,17,00,866	5,20,66,027	9,10,155	12,32,416
1858–59 - - - -	2,93,08,408	1,42,96,207	4,36,04,615	3,37,99,807	57,28,536	3,95,28,343	17,16,376	13,11,689
1859–60 - - - -	2,99,07,033	1,74,39,684	4,73,46,717	3,87,82,800	45,47,547	4,33,30,347	12,56,494	23,14,750
1860-61 - - - -	3,16,55,812	2,07,25,887	5,23,81,699	4,45,98,338	62,88,632	5,08,86,970	15,07,146	25,79,464
1861–62 - - - -	3,44,94,138	2,22,85,900	5,67,80,038	5,42,92,250	39,58,486	5,82,50,736	11,20,099	20,75,279

Annexed is a comparative analysis of the foreign import trade for the last two years:—

ARTICLES.	VALUE.		ARTICLES.	VALUE.	
	1860-61.	1861-62.		1860-61.	1861-62.
	Rs.	Rs.		Rs.	Rs.
Millinery and wearing apparel.	8,24,720	7,22,627	Malt liquors - - -	4,81,372	3,85,778
Gold and silver lace and thread.	5,51,074	3,33,808	Metals - - - -	30,29,981	36,22,062
Books and stationery - -	4,66,168	4,90,049	Naval stores - - -	2,46,219	1,57,899
Twist and yarn - - -	38,84,154	38,05,703	Oilman's stores - - -	1,81,178	2,13,996
Piece goods, dyed - -	10,29,214	9,50,946	Porcelain and earthenware	1,53,019	1,73,144
Ditto - printed - -	7,00,739	6,24,848	Pipe staves and casks -	1,41,640	1,26,886
Ditto - plain - -	44,08,469	36,60,739	Provision - - - -	1,59,100	1,53,839
Drugs - - - - -	3,87,003	3,53,946	Railway stores - - -	26,56,226	27,15,079
Dyes - - - - -	1,36,653	96,886	Seeds - - - -	1,72,799	2,08,504
Betel-nut, boiled - - -	1,90,166	3,70,867	Silk, raw - - - -	1,03,279	2,54,644
Ditto, raw - - -	2,92,451	2,96,187	Silk piece goods - -	2,04,728	2,44,720
Glass-ware - - - -	1,36,552	1,46,170	Spices - - - -	2,76,028	3,14,410
Paddy - - - - -	5,49,346	7,21,344	Spirits - - - -	2,46,048	2,80,752
Rice - - - - -	7,48,637	23,49,994	Tea - - - - -	2,64,074	1,52,308
Wheat - - - - -	2,59,689	2,48,139	Timber and planks - -	6,50,482	6,25,054
Grain of sorts - - -	1,17,760	2,89,571	Wines - - - -	5,70,155	4,73,779
Gunnies and gunny bags -	4,83,580	4,95,277	Woollens - - - -	3,68,340	3,09,828
Jewellery - - - -	3,75,186	2,37,263	Sundries - - - -	61,50,587*	76,84,997*
Machinery - - - -	58,996	2,02,095	TOTAL - - -	3,16,55,812	3,44,93,138
			£.	3,165,581	3,449,413

	1860-61.	1861-62.
* Includes Government stores - - -	26,64,239	45,01,187
Ditto - ditto - salt - - -	4,30,197	1,64,018

The statistics of the cotton export trade are shown below:—

PORTS.	1860-61.		1861-62.	
	Quantity.	Value.	Quantity.	Value.
	Lbs.	Rs.	Lbs.	Rs.
United Kingdom - - - -	13,533,282	18,26,615	39,086,862	71,26,610
Ceylon - - - - - - -	1,013,738	1,42,247	984,337	1,45,667
Hong Kong - - - - -	768,800	1,03,953	—	—
China - - - - - - -	5,023,415	7,04,886	—	—
France - - - - - - -	1,036,212	1,12,114	2,537,334	3,71,488
Maldive Islands - - - -	784	105	448	67
Mauritius - - - - - -	6,922	948	—	—
Penang, Singapore and Malacca - -	36,000	4,800	—	—
Bombay - - - - - - -	53,102,507	78,65,117	43,992,690	92,74,673
Calcutta - - - - - - -	4,128,965	5,09,855	692,764	87,661
Chittagong - - - - - -	8,725	687	—	—
Goa - - - - - - - -	1,312	48	—	—
Indian French Ports - - - -	162,242	19,821	235,476	31,150
Moulmein - - - - - - -	123	15	—	—
Aden - - - - - - - -	- - -	- - -	3,080	659
Arabian Gulf - - - - - -	- - -	- - -	11,480	2,240
TOTAL - - -	78,822,027	1,12,91,211	87,544,471	1,70,40,215
		£. 1,129,121		£. 1,704,021

The increase in the quantity over the preceding year is 8,722,444 *lbs.*

The new tariff of values for duty was introduced during the year. Several of the items need to be altered to suit them to this Presidency.

1860-61 - - *Rs.* 10,08,339
£. 100,833
1861-62 - - *Rs.* 3,11,514
£. 31,151

77. Moturpha.—This source of revenue was relinquished on 1st August 1861, in favour of the trades duty, generally designated the license tax, which again was abolished on 7th March 1862, and the amount that had been collected was refunded. The decrease arising from these changes amounts to 6,96,825 rupees.

This long promised relief is a great boon to the labouring classes.

1860-61 - - *Rs.* 13,95,972
£. 139,597
1861-62 - - *Rs.* 29,54,576
£. 295,457

78. Stamp Revenue.—The increase in the stamp revenue continues to be most satisfactory, and amounted to 15,58,604 rupees. The revenue, in fact, more than doubled itself in the year, while the tax is one that is little felt by the individual, and excites no opposition. Modifications have been made in the law by the recent enactment, but it is still capable of improvement in several respects.

The local system of manufacturing stamps has worked very satisfactorily. The greatly increased demand has been met without difficulty, and stocks are well supplied.

At the recommendation of the Board of Revenue, the introduction of the system of remunerating all vendors by a commission on sales has taken place with good effect.

1860-61 - - *Rs.* 2,87,419
£. 28,741
1861-62 - - *Rs.* 2,71,484
£. 27,148

79. Frontier Customs show a falling off amounting to 15,935 rupees, or 1,593 *l.*, as compared with last year, owing to the reduction of duty, and to the transfer of the export trade from the French ports alluded to in a former paragraph.

1860-61 - - *Rs.* 5,42,914
£. 54,291
1861-62 - - *Rs.* 16,93,791
£. 169,379

80. Income Tax.—Under income tax there is an increase of 11,50,877 rupees, or 115,087*l.*, which is mainly due to the fact that the preceding year's accounts included the collections of the tax for two quarters only. The tax is unpopular, and in its present form is peculiarly unsuited to the natives of India; but its limitation to incomes of 500 rupees and upwards, which will take effect from 1st August 1862, will afford material relief, and exempt the majority of present payers.

81. Total Sundry Sources.—The annexed abstract shows at one glance the revenue from sundry sources, which includes all usual items except land, as compared with the preceding year. The result is a net increase of 32,26,778 rupees, or 322,677 *l.*:—

Items.	1860-61.	1861-62.	Increase.	Decrease.
	Rs.	*Rs.*	*Rs.*	*Rs.*
Abkarry - - - - - -	30,72,921	33,28,807	2,55,886	—
Salt - - - - - - -	70,60,770	86,01,418	15,40,648	—
Sea Customs - - - - -	27,01,861	21,35,384	- -	5,66,477
Moturpha - - - - - -	10,08,339	3,11,514	- -	6,96,825
Stamps - - - - - -	13,95,972	29,54,576	15,58,604	—
Frontier Duty - - - - -	2,87,419	2,71,484	- -	15,935
Income Tax - - - - -	5,42,914	16,93,791	11,50,877	—
Total - - - *Rs.*	1,60,70,196	1,92,96,974	45,06,015	12,79,237

Net Increase - - - - - - *Rs.* 32,26,778

1860-61 - - *Rs.* 1,57,069
£. 15,706
1861-62 - - *Rs.* 1,22,985
£. 12,298

82. Miscellaneous Items of Extra Revenue.—This is a head of account to which interest, collections after the close of the revenue year, &c., are credited, and fluctuations in it, are unimportant.

In last year's statements the proceeds of the pearl fishery in Tinnevelly were credited to this head, which was greatly swelled thereby; but in the present year the item has, under instructions from the Account Department, been brought to account under Sayer Revenue, and included in the general statement under the head of Land Revenue.

83. General Results.—The total revenues of the year are shown in the margin under the three general heads of account in comparison with the preceding year, the result being, as already stated, an increase of 42,12,184 rupees, or 421,218 *l.*

Item.	1860-61.	1861-62.
	Rs.	*Rs.*
Land Revenue - -	4,03,99,389	4,14,18,879
Sundry sources - -	1,60,70,196	1,92,96,974
Miscellaneous items -	1,57,069	1,22,985
Total *Rs.*	5,66,26,654	6,08,38,838
or £.	5,662,665	6,083,883

84. Local Funds.—The returns of income and expenditure of local funds for 1861-62 are not yet complete; but a statement for the preceding year, 1860-61, is annexed, in continuation of that for 1859-60, which was given in last year's report; and exhibits a very large increase both of revenue and expenditure. This fund places in the hands of the district authorities the most valuable means of effecting improvements without charge on the general revenues of the State, and its importance can scarcely be over-estimated.

DISTRICTS.	Balance of 1859-60.	Receipts of 1860-61.	Total.	Expenditure.
	Rs.	*Rs.*	*Rs.*	*Rs.*
1. Ganjam	- -	250	250	—
2. Vizagapatam	50	150	200	—
3. Godavery District	429	47	476	300
4. Kistna District	9,587	54,650	64,237	3,870
5. Nellore	12,909	29,766	42,675	10,838
6. Cuddapah	- -	78	73	—
7. Bellary	5,122	15,887	21,009	19,393
8. Kurnool	- -	11,427	11,427	—
9. Madras	12,630	13,740	26,370	2,668
10. North Arcot	27,167	38,778	65,945	58,608
11. South Arcot	12,699	64,064	76,763	63,571
12. Tanjore	12,637	7,124	19,761	796
13. Trichinopoly	1,247	1,296	2,543	1,073
14. Madura	11,317	10,100	21,417	1,774
15. Tinnevelly	- -	1,500	1,500	—
16. Coimbatore	13,641	19,912	33,553	7,165
17. Salem	4,899	30,159	35,058	33,511
18. North Canara	3,917	7,930	11,847	2,432
19. South Canara	11,517	7,467	18,984	6,971
20. Malabar	23,594	50,538	74,132	41,248
TOTAL - - - *Rs.*	1,63,362	3,64,858	5,28,220	2,54,218

85. DISTRICT PRESSES.—The annexed statement of the results of the working of the Collectorate Presses is, similarly, for 1860-61, in continuation of that inserted in the report for last year, no later complete statements being yet available. Very valuable results are obtained from these presses, and more will gradually be developed. Their earnings valued at fair press-rates more than cover all charges, and efficiency and economy have been alike promoted by their establishment.

DISTRICTS. 1.	Estimated Value of Work done. 2.	Income. 3.	Expenditure in 1860-61. 4.	Difference between Columns 3 and 4.	
				Excess. 5.	Saving. 6.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Ganjam	3,266	2,057	2,349	292	—
Vizagapatam	2,132	1,749	2,477	728	—
Godavery District	3,525	3,229	1,771	- -	1,458
Kistna District	3,939	4,486	1,728	- -	2,758
Nellore	6,332	1,937	1,447	- -	490
Cuddapah	3,027	2,150	1,460	- -	690
Bellary	3,675	4,147	2,866	- -	1,281
Kurnool	2,131	1,698	1,623	- -	75
Madras	2,748	1,959	1,657	- -	302
North Arcot	2,471	1,871	1,594	- -	277
South Arcot	4,313	2,080	2,030	- -	50
Tanjore	4,193	2,268	2,219	- -	49
Trichinopoly	2,023	1,652	1,257	- -	395
Madura	3,568	2,260	1,515	- -	745
Tinnevelly	1,867	2,351	2,193	- -	158
Coimbatore	2,497	2,085	1,537	- -	548
Salem	2,952	3,000	2,056	- -	944
South Canara	2,436	2,151	1,974	- -	177
Malabar	6,905	6,336	3,046	- -	3,290
TOTAL - - - *Rs.*	63,100	49,466	36,799	1,020	13,687

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Madras.

86. Pearl Fishery.—A fishing took place in March 1862, but the result, though satisfactory, was not so remunerative as that of last year. The fishing was continued for twenty-one days, and resulted in a net profit to Government of 1,10,619 rupees, or 11,062 *l.*

It is anticipated that next year's fishing will be more productive.

87. Municipal Institutions.—These have not extended since last year, and are confined to the Vizagapatam and Salem districts. In the former district, the institution works very satisfactorily. In Salem it appears to be breaking down. In Nellore town, something of the same character has been organized by the Collector for effecting certain specific improvements of the streets and approaches and of the water supply. In all these districts the system is voluntary; nowhere have the inhabitants consented to the introduction of the Act No. XXVI. of 1850.

88. District Exhibitions.—The annual cattle show at Addunki, in the Nellore district, was, as in the preceding year, the only one of the kind, and was as successful as it has hitherto been. Decided and valuable improvements have already been secured by this exhibition.

89. Miscellaneous.—Among matters of local importance that occurred during the year may be mentioned the transfer of the greater part of the district of North Canara to Bombay, in view to the more speedy development of the harbour and port of Beitkole. This was finally carried out on the 16th April 1862, the Taluk of Cundapoor being re-attached to the district of South Canara.

The revision and codification of the Land Revenue Law of this Presidency has been completed, and the Draft Bill is now before the local Legislature.

The revision of the Abkarry Law has been taken in hand in consequence of a ruling of the Sudder Court, declaring that the retail of foreign wines and beers needs no license. Opportunity will, at the same time, be taken to remove defects in the existing law, which the increase of hotels, with the extension of the railway, have brought more prominently forward.

The opening of the Madras railway throughout is too recent to allow of any judgment being formed as to its effects, which cannot fail to be beneficial. The north-western branch has been extended to Putur. The southern railway has been opened from Negapatam to Trichinopoly. Its further extension into the interior is in contemplation, and cannot fail to have an important influence on the Government salt revenues and the prosperity of the inland districts, now in great measure shut out from the markets and emporiums of trade.

The Collectors have been instructed to register all applications for waste land under the Governor General's Resolution of 17th October 1861; but its further operation has been suspended, a reference having been made to the Supreme Government as to the price to be charged in this Presidency.

The redemption of the Land Tax at twenty years' purchase does not seem likely to attract much notice, when 12 per cent. interest and good security can be readily obtained for money invested in the general market.

The revision of the establishments is nearly completed. That of the Sea Customs and Marine Departments has lately been under the consideration of Government, and the approved scale has been forwarded for the sanction of the Supreme Government.

The Village Establishments alone remain to be disposed of; but the question as regards them involves far more complicated and extended considerations than the general Government service.

The payment of military pensions was, with some few exceptions, transferred to the revenue officers, and the establishment withdrawn or greatly reduced—but this change has not proved satisfactory. It has been found that at stations where the pensioners are numerous, the Civil Department cannot undertake the duty of paying them without serious prejudice to more important work. Orders have, therefore, been issued for relieving the civil authorities at these stations from this duty.

Special tests for admission and promotion in the higher grades of the Revenue Establishments have been proposed, and sanctioned.

Notice has been given to the mercantile community that the Government bonding warehouse at Madras will be finally closed in July 1863, and meanwhile no fresh goods are admitted, or renewal of bonds allowed. The measure has led to an extension of the private licensed warehouse, and will relieve Government of a responsibility which it ought not to incur.

To limit as much as possible the destruction of the jungles, while affording all due facilities for the extension of cultivation, and the supply of the timber market, is a matter of vital importance to prevent the diminution of the rainfall, which seems unquestionably to have become more fitful and uncertain of late years. The attention of the Board of Revenue has been constantly directed to the subject, and rules for the conservancy of the minor jungles not under the Forest Department have been introduced. It is hoped that in the course of a few years a marked advance may be visible in the formation of plantations under the operation of these rules.

INCOME TAX IN THE PRESIDENCY TOWN.

Introduction of Act No. XXI. of 1861.

90. In August 1861, Act No. XXI. of 1861 became law, and rendered unnecessary the large service of special notices which had been issued under Act XXXII. of 1860.

Establishments reduced.

91. This simplification of the income-tax law enabled the Commissioners at once to make considerable reductions in the income-tax establishments, whereby an immediate saving of 1,236 rupees per mensem was effected, and during the current year further reductions have been made, amounting to 845 rupees per mensem. The actual total retrenchments made in the year 1861-62, being 10,551 rupees.

Effect of Act XXI. of 1861.

92. The inhabitants of Madras availed themselves largely of the provisions of Act XXI. of 1861, which freed them from the necessity of making any fresh returns. It was, however, necessary to complete, as information was received, the issue of notices to parties who had escaped taxation during 1860-61, and to furnish forms of returns to parties, who, from considering themselves over-taxed during that year, applied to be assessed *de novo* for 1861-62.

Assessments.

93. The new assessments described above, numbered 7,901, of which 6,558 were for 1860-61, and 1,343 for 1861-62.

Income tax year from the 31st July to 1st August.

94. It must be remembered that the income-tax year is from the 31st July to the 1st August, while the ordinary official year terminates on the 30th April, so that the report of the present official year exhibits a portion of the results of the past income-tax year.

Collection of arrears.

95. During the official year now under report, viz., from 1st May 1861 to 30th April 1862, the collection of the arrears due for the income-tax year 1860-61 was completed, with the exception of 6,732 rupees outstanding at the close of the year. Of this balance up to the 31st May, 598 rupees had been realised, leaving an outstanding balance of the income-tax year 1860-61 of 6,134 rupees, the greater portion of which is irrecoverable.

Demand and collection for 1861-62.

96. The total demand in the town of Madras for the income-tax year 1861-62, as ascertained up to the close of the official year 1861-62, was 2,81,901 rupees. The demand for the three-quarters due at the close of the official year 1861-62 was 2,11,425 rupees, of which 98,310 rupees were collected up to 30th April 1862, and 1,22,509 rupees up to the 31st ultimo.

Act No. XVIII. of 1861 brought into force.

97. When Act No. XVIII. of 1861, for imposing duties on arts, trades, and professions was passed, several persons who had been assessed during 1860-61 at the two per cent. income-tax rate, were transferred to the lists drawn up of persons who should be taxed under the new Act.

Repeal of Act No. XVIII. of 1861.

98. Act XVIII. of 1861, was, however, subsequently abolished, and the benefit of the doubt of their liability to income tax was allowed to the parties who had been transferred as described above.

Surcharges and appeals.

99. Four thousand seven hundred and sixty-six surcharges were made upon the returns received during the official year 1861-62; of these 4,503 were disposed of; 2,088 persons appealed from these surcharges, and 448 of these appeals were successful.

Revisions and cancellations.

100. Eight hundred and five applications were made by parties claiming revision, abatement, or cancellation of assessments. Upon these applications, remissions to the amount of 18,799 rupees were granted.

Complaints against income tax officials.

101. One charge of extortion was made against a subordinate income-tax employé, and he was committed for trial to the Supreme Court and acquitted. A charge of embezzlement of 36 rupees was likewise made against the accountant in the collecting department; and the charge having been established, he was sentenced to 18 months' imprisonment with hard labour.

Cost of collecting the tax.

102. The cost of the Income Tax Establishment for the year 1861-62, was 63,477 rupees, and the charge for honorarium fees, office rent, and contingencies, was 6,927 rupees, making a total of charge against income-tax revenue of 70,404 rupees, or 23 ½ per cent. Under the provisions of the Income Tax Act, No. XVI. of 1862, parties whose incomes are below 500 rupees per annum, will not in future be liable to income tax. These two per cent. assessments bear in Madras the large proportion of 75 per cent. to the total number of assessments made, while the total amount of collections at the two per cent. rate, only amounts to 15 per cent. of the annual income tax realised in the Presidency town.

Further reductions proposed for 1862-63.

103. The Commissioners, seeing that by this change in the law, the labour involved in the work of assessment and collection will be greatly reduced during the next income-tax year, 1862-63, have recommended a reduction for the income-tax establishment for the town of Madras, by which a saving of 36,135 rupees per annum will be effected.

Reduction sanctioned.

104. The Government have approved of the recommendation made by the Commissioners, which will be carried into effect after the 31st July next.

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Appendix A. exhibits the details of the working of the income tax in the Presidency town during the official year under report, and of the expenditure on account of establishments, contingent bills, honorarium fees, office rent, &c.

REVENUE SURVEY AND SETTLEMENT.

Number of survey and settlement parties, and the districts in which they were at work.

105. Five survey and five settlement parties were at work during the year under report in the following districts; viz., Godavery, Kistna, Nellore, Kurnool, Salem, Trichinopoly, Coimbatore, and in the Wynad taluk of Malabar.

The new settlement brought into operation in South Arcot.

106. The new settlement was brought into operation in the Chedamberam taluk (formerly Chedamberam and Manargudi), in South Arcot, during the year. It has resulted in a much smaller decrease of revenue than was anticipated.

Introduction of the settlement in the Godavery district.

107. The field measurements in the Godavery district were completed during the year, and the settlement was introduced and explained to the ryots individually in 154 out of 240 Government villages in the Western Delta taluks. It will come into actual operation in the whole of that tract from the 1st July next. A proposal for the settlement of the remaining portion of the district, comprising an area of about 1,337 square miles, was submitted to the Board of Revenue, under date the 11th December 1861, and, pending the orders of Government on it, the preparation of the settlement registers is in progress.

Operations in Guntoor in progress.

108. In the Kistna district, demarcation and classification were carried on during the year in the Guntoor portion, the Masulipatam division having been completed during the previous year. The detail survey extended to portions of both divisions. A proposal for the settlement of the Masulipatam portion was forwarded to the Board on the 12th October 1861.

Operations in Nellore in progress.

109. In Nellore, the work of the settlement branch was confined during the year to the demarcation of taluk, village, and field boundaries. The classification of soils will commence as soon as sufficient progress has been made in the detail survey of the district, which has not hitherto been carried on by a fully organized party.

Operations in Kurnool.

110. In Kurnool, the demarcation of boundaries in the Ramallakota taluk was completed during the year. This is the locality which will be first affected by the works of the Madras Irrigation and Canal Company. A commencement has been made in the classification of soils, in view to the introduction of the new settlement in the locality in question at the earliest possible date. The survey will take the field in the current year.

Salem district completed, and about to be reported on.

111. In Salem, the field operations in the settlement branch were completed during the year, and a proposal for the revision of the assessment will be submitted as soon as the receipt of the survey field areas affords a basis for the calculations of the financial results. Considerable progress has been made in the measurement of fields in the plains, and also of coffee plantations on the Shevaroy hills.

Preparation of the settlement registers in Trichinopoly.

112. Pending the receipt of the orders of Government on the report for the settlement of the Trichinopoly district, a beginning has been made in the preparation of the settlement registers for the Trichinopoly and Musiry taluks. The measurement of interstitial fields was continued and completed during the year.

Field operations in the Wynad wound up.

113. In the Wynad, the demarcation of the boundaries of coffee estates was carried on during the healthy season; 678 titles were investigated, of which 482 were registered up to 31st October 1861, when the work was discontinued under the orders of Government, dated the 21st idem. Survey operations were carried on to a proportionate extent.

Orders passed on the dry and wet assessments in the Wynad.

114. The Government decided, in their proceedings of the 26th March last, that the assessment on the dry lands in the Wynad should be two rupees per acre, being the same as that fixed for coffee estates, and that the existing money rates on paddy cultivation should continue in force, except where they are so oppressive as to render a reduction necessary.

Operations in progress in Coimbatore.

115. The operations in Coimbatore were carried on at intervals during those periods when the employment of the field parties in the Wynad was rendered impracticable owing to the unhealthy season. The area accomplished was therefore necessarily small. This remark applies to the survey as well as the settlement operations.

Demarcation to be commenced in Tinnevelly.

116. A staff of demarcators from the Salem party is now on its way to Tinnevelly, to commence the demarcation of boundaries for survey.

Working of the lithographic department.

117. There has been a decided improvement in the working of the lithographic department during the current year. The introduction of zincography and the substitution of symbols for colours in village maps have led to increased expedition in turning out the latter. The average cost per square mile, during the year 1861–62, is 6-4-0 rupees against 12-8-0 rupees in the previous year, and it will be further reduced hereafter.

118. The out-turn of field work during the year is exhibited in the following table:—

Particulars of work for the year 1861-62.

DISTRICTS.	Completed.		In Progress.	
	Number of Villages.	Area in Square Miles.	Number of Villages.	Area in Square Miles.
Demarcation.				
Nellore	210	1,578	129	1,076
Kistna	298	2,170	47	383
Kurnool	76	407	48	384
Salem	1,558	2,260	—	—
Coimbatore	185	352	22	67
Wynad	- - -	155	—	—
Total	2,327	6,922	246	1,910
Classification.				
Kistna	297	1,600	41	333
Kurnool	6	23	5	10
Salem	1,593	2,288	1	1
Total	1,896	3,911	47	344
Survey.				
Godavery	130	1,140	—	—
Nellore	292	446	—	—
Kistna	320	1,283	—	—
Salem	850	1,177	—	—
Coimbatore	110	317	—	—
Wynad	- - -	85	—	—
Total	1,702	4,448	—	—

The demarcation of 2,327 villages, comprising an area of about 6,922 square miles, was completed during the year, and 1,910 square miles in 246 villages were in progress at the end of it. Bringing 50 per cent. of the latter to account, 7,877 square miles will represent the work of the year, which is more than the estimated standard. An area of 3,911 square miles was classified in 1,896 villages, and 344 square miles more in 47 villages in progress; 1,702 villages, with an area of about 4,448 square miles, were surveyed during the year.

119. The expenditure of the year is given below:—

Cost of operations, settlement.

Settlement.	*Rs.*
Central office	61,866
Godavery district	12,642
Nellore	30,007
Kistna	65,748
Kurnool	23,973
Salem	82,639
Trichinopoly	5,185
Coimbatore	4,434
Wynad	39,415
South Arcot	3,248
	Rs. 3,29,157

Cost of operations, survey.

Survey.	
Central office	37,978
Godavery district	77,744
Nellore	49,510
Kistna	66,721
Kurnool	2,261
Salem	86,933
Trichinopoly	
Coimbatore	55,540
Wynad	
Extra party in Trichinopoly and Salem	6,083

SURVEY—*continued.*

	Rs.
Lithographic Establishment, including contingent charges	10,398
Extra measurers and coolies in the Godavery and Kistna districts - - - - - - - - -	12,991
Instruments - - - - - - - - - -	12,000
Total - -	*Rs.* 4,18,159
Grand Total of Settlement and Survey - -	*Rs.* 7,47,316

INAM COMMISSION.

120. The object of the Inam Commission, and the principles upon which it has proceeded, have been so fully detailed in the Administration Report for 1859-60, that it will be sufficient to state that it was organized for the purpose of scrutinizing and finally settling the very uncertain tenures upon which inams, or lands, held either entirely free or on a favourable rent, were enjoyed. The Commissioner was appointed under the sanction of the Court of Directors in November 1858, but he did not commence active operations till the following September.

The present Report gives the results of the third year of the working of the Commission. The actual work accomplished within the year is shown in the subjoined Table :—

Description of Inam.	Number of Titles confirmed.	Extent in Acres.	Value or estimated Assessment.	Existing Quit-rent Paid thereon.	Additional Quit-rent stipulated to be Paid for Enfranchisement.	Additional Quit-rent not agreed to be Paid.	Number of Cases decided by Deputy Collectors.
			Rs.	*Rs.*	*Rs.*	*Rs.*	
Devadayam and Dharmadayam, or religious and charitable grants of a permanent character - -	24,456	2,28,212	3,57,999	17,366	3,860	- -	Personal Inams. 1,02,558
Personal grants enfranchised at the option of Inamdars - 54,843 Compulsorily - - 29,102	83,945	11,29,049	11,67,627	1,62,254	1,88,377	- -	Service Inams. 76,141
Personal grants not enfranchised, &c. confirmed on present tenures -	3,201	54,824	62,659	7,566	- -	11,685	—
TOTAL - - -	1,11,602	14,12,085	15,88,285	1,87,186	1,92,237	11,685	—

Results of the settlement during the past year.

121. Though the services of four out of the sixteen deputy collectors were dispensed with at different periods within the year, the usual rate of progress has been maintained. The number of cases of personal and religious inams decided by the deputy collectors during the year was 1,02,558, besides 76,141 of village service inams. Of the former class 1,11,602 cases were reviewed and confirmed in the Commissioner's office, producing a permanent annual revenue to Government, amounting to 1,92,237 rupees, in the shape of quit-rent charged on enfranchised inams. The cost of the commission during the year was 1,75,000 rupees.

The total results of the operations of the Commission from its commencement to end of 1861-62.

122. The following Table exhibits the total results of the operations of the commission from the commencement of the undertaking to the end of the year under report :—

Description of Inam.	Number of Titles confirmed.	Extent in Acres.	Value or estimated Assessment.	Existing Quit-rent Paid thereon.	Additional Quit-rent stipulated to be Paid for Enfranchisement.	Additional Quit-rent not agreed to be Paid.	Number of Decisions by the Deputy Collectors.
			Rs.	*Rs.*	*Rs.*	*Rs.*	
Devadayam and Dharmadayam, or religious and charitable grants of a permanent character - -	41,540	4,59,627	7,07,288	33,775	10,378	- -	Personal Inams. 2,50,686
Personal grants enfranchised at the option of Inamdars - 1,20,107 Compulsorily - - 63,760	1,83,867	20,93,341	25,21,318	2,96,740	3,86,444	—	—
Personal grants not enfranchised, &c. confirmed on present tenure -	5,626	96,080	1,17,933	16,295	- -	19,712	Service Inams. 1,10,846
TOTAL - - -	2,31,033	26,49,048	33,46,539	3,46,810	3,96,822	19,712	—

Total amount of additional revenue secured to the State.

123. The total additional revenue secured permanently to Government is 3,96,822 rupees; of which 45,362 rupees have been charged on Jangi Kattubadies, a class of

persons hitherto employed in the ceded districts, on general police duties, the annual assets from whose inams will now be available for the payment of the new police. The number of titles disposed of at the close of the year was 2,31,033.

Work already accomplished, and what remains to be done.

124. The Godavery and Kistna districts were completed in the preceding year, and the inquiry has since been closed in Bellary, Cuddapah, Kurnool, Nellore, Madras, and South Arcot. The districts of Salem, Trichinopoly, Tanjore, Vizagapatam, Ganjam, and Coimbatore, were successively taken in hand before the expiration of the year; and to complete the entire Presidency, there remain only Madura and Tinnevelly, and the two districts on the western coast, where there are few, if any, inams.

Settlement of village service inams in the ceded districts.

125. The important measure of the enfranchisement of the village service inams upon the principles set forth in the last Report, has been carried through with success in the ceded districts and Kurnool. In a few taluqs where the assessment was particularly high, a considerable extent of service inam land has been relinquished by the holders, owing to their inability to pay the high quit-rent of five-eighths of the assessment. In districts where a large proportion of inam as well as of sircar land lies waste, a quit-rent, equal to five-eighths of the full assessment of the entire area of the inams, will sometimes trench unduly upon the profits of the inamdar. This is a result, however, which was foreseen by the Government, and cannot, indeed, be avoided in general measures of this kind; but it is expected that many of the inamdars will be induced, by the hope of prospective benefit, to take back their relinquished land. The registers not having been as yet finally reviewed in the Commissioner's office, the results of the enfranchisement of the service inams are not exhibited in the present Report.

No questions have arisen requiring special consideration in the districts newly taken in hand.

126. In the districts newly taken in hand during the year, few questions of importance have arisen which are not provided for by the rules.

Peculiar character of the Sikka Sanads of Tanjore.

127. In Tanjore about two-thirds of the inams are held on sanads, of one kind or another, from the Tanjore Rajahs. Amongst these, the sikka sanads, or grants under the Royal signet, have always been regarded as of a peculiarly perfect character. They confer the inams on the grantee and his heirs in perpetuity; but the fact that inams so supported have been allowed to be sold and transferred at will, without authoritative interference, led to a belief that they partook of the nature of freehold properties to which the Government had relinquished all reversionary right. Such alienation of inam property is not peculiar, however, to the district of Tanjore or confined to this particular class of inam, the practice having originated and been allowed to continue both there and elsewhere, owing to the unsettled state of the inam question throughout the Presidency. In the absence, therefore, of any express provision in these sanads authorizing the disposal of the inams out of the original family, the above plea has been rejected; but the hereditary character of the grants in question has been admitted to the fullest extent, and the right of succession conceded to all descendants of the family, whether lineal, collateral, or adopted, divided or undivided, male or female, who are recognized as heirs according to Hindu law; wherever such heirs exist, the inams are enfranchised and converted into saleable and freehold property at the lowest rate of quit-rent, viz., one-eighth of their value. The question having been thus fairly dealt with, the settlement of the inams of the district is rapidly proceeding to the satisfaction of all parties concerned.

Settlement of inams in Vizagapatam and Ganjam.

128. In the districts of Vizagapatam and Ganjam, it was at first apprehended that owing to the supposed low condition of landed property and other causes, the settlement and enfranchisement of inams would neither be appreciated nor desired, especially in the large zemindari tracts of both districts, where the claims of Government to escheats had been rarely asserted, and were little understood. On the Commissioner's arrival, however, it was found that the zemindars, with scarcely an exception, were quite prepared for his proceedings, and the inamdars in general were most desirous of securing the benefit of the settlement. It has therefore commenced and is being conducted on the same principles as elsewhere. An important question connected with the right of reversion in a large number of tenures in Ganjam, known as jaghirs or mokasas, is now under consideration.

The object of the present Settlement and proposed Bill to exempt enfranchised inams from existing restrictive regulations.

129. The object of the present settlement is to confer on inamdars, in return for an equivalent annual quit-rent, a perfect right of freehold in their inams with power to sell and transfer them at will, like other private property, placing them at the same time under the jurisdiction and process of the ordinary courts of the country; doubts being entertained as to how far this could be done in the face of Regulation IV. of 1831, one of the objects of which, it was held, was to secure the succession and enjoyment of these grants to the families of grantees, a discussion arose as to the real intent and meaning of this regulation, which has finally resulted in the introduction into the local legislative council of a Bill formally declaring enfranchised inams exempt from the operation of Regulation IV. of 1831, and the other restrictive enactments, XXXI. of 1836 and XXIII. of 1838.

130. This completes the record of the proceedings connected with the Inam Department for the past year. It is confidently expected that the actual inquiry will be closed in the course of the current official year.

CONSERVANCY OF FORESTS.

North Canara transferred to Bombay.

131. The finest and most profitable of the forests belonging to the Madras Presidency, that of North Canara, has been made over during the year under report to the Bombay Government. The value of the wood of this forest was not realized during the year, but has largely accumulated at the depôts. Credit has been taken for this wood, in the receipts of the year, as timber made over to the Bombay Government.

Financial results of conservancy.

132. The net profit of the year amounts to the large sum of four lacs, twenty-eight thousand six hundred and thirty-nine rupees, with a stock of timber worth two lacs and sixty-nine thousand rupees. This stock is entirely due to the large amount of timber which, as shown above, was transferred to the Bombay Government on the making over of the district of North Canara.

If the North Canara profit is reduced to the same figure as it stood last year, viz., *Rs.* 1,74,754. 11 *a.* 7 *p.*, then the results of Forest Conservancy for the year show, as compared with last year, as follows:—

	Rs.	*a.*	*p.*
Profit for 1860–61 - - - - - -	1,83,731	10	9
Profit for 1861–62 - - - - - -	2,03,585	–	–

or an increase in the general revenue of *Rs.* 19,853. 5 *a.* 3 *p.*

The profits of the last three years, calculated on the same data, are as follows:—

	Rs.
For 1859–60 - - - - - -	1,98,294
For 1860–61 - - - - - -	1,83,731
For 1661–62 - - - - - -	2,03,585

The loss of the North Canara forests will, of course, materially affect the financial results of the conservancy during the present year; but there is reason to hope that if the remaining forests be vigorously worked, a profit of one lac of rupees may be realised.

Wynad forests.

133. During the year under report strict attention has been paid to the conservancy of the Wynad Forests. The system of temporary clearings, known as Tukkul, has been checked. Arrangements for the removal of all dead trees are being carried out, and a proposition to amalgamate the Hoonsoor with the Wynad forests, uuder the charge of one assistant, has been submitted to Government.

The expenses of conservancy of the Wynad forests have been more than met by the receipts, and if the amalgamation of Hoonsoor and Wynad be systematically carried out, a profit of 10,000 rupees may be anticipated for 1862–63.

Mudumallai forests.

134. The working of the Mudumallai forests has been conducted energetically during the year under report. The Bangalore and Neilgherry barracks and gaol, the railway and other works have been supplied with timber from these forests, and large depôts containing 90,000 cubic feet of timber have been formed at Sawyer's village and Tippacadoo.

	Rs.
Expenditure -	37,474
Receipts - -	37,936

135. The expenditure was more than met by the receipts, while a large quantity of seasoned timber has been collected. Of this wood more than 30,000 rupees' worth will be required for the Lawrence Asylum this year, and about the same amount for the Bangalore barracks and railway.

Seegur forest.

136. The teak in this forest has been strictly conserved during the year; but there have been no operations in teak or vengay. The Mudamallai wood in depôt relieves the Seegur forest, which requires rest, owing to the contractors in former years having taken out nearly every teak tree fit to be cut.

The working of the sandal wood jungles has been satisfactory, and a large range of country remains untouched. An annual profit of 20,000 rupees may for years to come be anticipated. Still larger profits would be realized if labour was more abundant.

South Canara.

137. These forests have hitherto been worked on the stump fee system, which, with small establishments to superintend the work, is not remunerative. This year a sum has been sanctioned to enable the forest department to fell and bring to the depôt, teak, poon, and other timber.

Neilgherry sholahs.

138. These woods have been under constant inspection during the year. Preparations for replanting the Governor's sholah have been made; several thousand pits have been dug, and the young plants have been got ready to be put in with the first rains. Those planted out last year are doing well.

The returns show a fair amount realized by the sale of sholahs; but the cost of supervision is out of all proportion to the returns. It has been proposed to place the Neilgherry sholahs and the Nellumbore teak plantations under a single officer, so as to reduce the expense of supervision.

Wellington fire-wood plantations.

139. These plantations are progressing more favourably. They cannot, however, yet be considered as a success, if the outlay on them is taken into account. A different system of planting has been introduced, by which it is expected a considerable saving will be effected.

Annamalai forests.

140. The result of the working of the Annamalai forests has not been satisfactory during the year under report. This has been owing in part to the illness of the officer in charge,

and to the want of branch roads in these forests. Steps have been taken to remedy the defects in the working, and it is anticipated that the revenue will be restored to its former amount, which was a lac of rupees.

Cuddapah forests.

141. The receipts from the Cuddapah forests exceed the cost of conservancy, but are still short of what they should be; and owing to the misconduct of the assistant in charge, who has since been dismissed, much of the conservancy work has been delayed.

Nellembore teak plantations.

142. During the year 50,000 saplings have been cut, which will tend greatly to relieve the plantations which were suffering from overcrowding. There was great scarcity of labour at the time of felling, and the work of thinning was so emergent, that only 30 acres were planted instead of 100, as had been intended.

The thinnings last year realized 4 annas each all round. This year they will, probably, sell at the rate of 5 annas each, the trees being somewhat larger; some old teak to the extent of 7,500 cubic feet has been cut, which, with thinnings, will realize about 20,000 rupees.

Salem forests.

143. The death of the assistant in charge in October last has been injurious to the conservancy of these forests. Another assistant has been appointed, and a thorough system of working the sandal-wood forests has been introduced.

Madura forests.

144. There has been an improvement in the revenue derived from these forests. It is intended to explore and bring under working the Cumbum valley and the Palatoor sandal-wood jungles. The demand for vengay and other woods is considerable, and there is every prospect of a further increase of revenue.

Cinchona experiments.

145. Success continues to attend the experiments made to introduce valuable varieties of the quinine-yielding plants on the Neilgherry Hills. It is satisfactory to learn that Mr. Cross approves of the sites selected at Ootacamund, more especially as he is the only practical man who has examined these sites and those on the Andes, where the best varieties of cinchona grow. An excellent propagating house has been built by Mr. McIvor on the newest system, and from this and a lower house some 12,000 plants are turned out monthly. The success obtained in propagating the plants has been very remarkable. The lower glass houses are full of plants in all stages, from the delicate seedling to the large plants brought by Mr. Cross, two of which will, probably, seed next year. There are altogether 1,200 large plants, from which small plants are constantly being propagated; the rest consist of seedlings and rooted cuttings.

PUBLIC WORKS.

Expenditure provided for in the budget.

146. The amount of expenditure provided for in the budget of 1861–62 was 70 lacs of rupees, including 6 lacs on account of doubtful items, but in the review thereof by the Supreme Government, under date 27th April 1861, No. 1,322, the outlay on public works of all descriptions was limited to 64 lacs of rupees, of which 17 lacs were for establishments and contingencies.

Subsequent grants.

147. Subsequently this assignment was increased by the following grants, viz., 1½ lacs of rupees for opening out facilities for the cotton and general export trade of the country, 3 lacs for the Upper Godavery works, and 89,000 rupees for police buildings. The latter sum, however, was authorised so late in the season that not more than 9,085 rupees were available, and that amount therefore should only be included in the total allotment, the aggregate amount of which is as follows:

	Rs.
New works and repairs entered in the budget -	39,53,570
Reserved fund - - - - - - -	5,46,430
Upper Godavery works - - - - -	5,00,000
Cotton roads, &c. - - - - - -	1,50,000
Police buildings - - - - - - -	9,085
Total - - - *Rs.*	51,59,085

Amount received from Rajah of Vizianagrum for roads, &c.

148. To this amount should be added a sum of 8,406 rupees received from the Rajah of Vizianagrum for the construction of roads leading to the Jeypore territory, while on the other hand there should be deducted therefrom the unexpended balance of North Canara allotment, 95,256 rupees, made over to the Bombay Government on the transfer to them of the district in January last. There will then remain 50,72,235 rupees*, as shown in the following statement, which has been prepared with reference to the various transfers made from one district to another, during the year under review.

	Rs.
* Sanctioned allotment - - - - -	51,59,085
Amount received from the Rajah of Vizianagrum - - - - - - -	8,406
	51,67,491
Deduct amount transferred to the Bombay Presidency - - - - - -	95,256
Balance - - - *Rs.*	50,72,235

DISTRICTS.	Revised Amount allotted for 1861–62.	Total Expenditure in 1861–62.	Total Expenditure in 1860–61.	DISTRICTS.	Revised Amount allotted for 1861–62.	Total Expenditure in 1861–62.	Total Expenditure in 1860–61.
	Rs.	*Rs.*	*Rs.*		*Rs.*	*Rs.*	*Rs.*
Ganjam - - -	1,52,393	1,50,418	92,142	Madura - - -	1,57,862	1,44,484	79,514
Vizagapatam - -	90,142	89,980	47,376	Tinnevelly - -	1,55,017	1,49,436	75,313
Upper Godavery -	5,00,000	3,57,260	77,976	Coimbatore - -	1,57,352	1,57,918	1,45,281
Godavery - -	4,95,248	5,01,436	3,16,366	Salem - - -	1,52,895	1,58,850	1,87,339
Kistna - - -	3,17,411	2,92,435	2,54,409	North Canara - -	1,34,540	1,34,540	1,25,891
Nellore - - -	2,63,068	2,21,506	3,20,930	South Canara - -	51,367	51,353	36,674
Cuddapah - -	2,39,057	2,35,971	1,82,012	Malabar - - -	1,73,177	1,75,209	1,61,465
Bellary - - -	2,74.893	2,57,503	2,31,679	Presidency - -	3,34,658	3,21,130	4,15,883
Kurnool - - -	92,853	85,438	80,824	Bangalore - -	1,62,990	1,37,893	1,83,417
Madras - - -	2,69,658	2,72,119	2,39,622	Wellington - -	42,875	43,590	1,53,313
North Arcot - -	2,09,229	1,95,442	1,61,376	Municipal Commissioners - -	24,397	24,397	24,397
South Arcot - -	1,84,035	1,83,989	1,50,484				
Tanjore - - -	2,19,270	1,95,968	2,88,347	Total - *Rs.*	50,72,235	47,52,622	42,04,988
Trichinopoly - -	2,17,848	2,14,357	1,72,958				

Difference between allotment and expenditure.

149. From this statement it will be seen, that the difference between the sanctioned allotment of funds for public works in 1861–62, and the expenditure thereon, is 3,16,613 rupees. In explanation of this difference it may be stated, that about two lacs of the amount have been laid out in advances for building materials supplied on contract or purchased for issue to works in progress, while the greater portion of the remainder will be required under the orders of Government, No. 851, dated 28th April 1862, to meet payments on account of certain charges incurred for works carried out prior to the close of the year under review, but which are not yet paid for.

Comparison of expenditure in 1861–62 with that of 1860–61.

150. The expenditure therefore in 1861-62, amounting to 5,50,634 rupees, in excess of that in the preceding year, and when all the outstanding claims are cleared off to very nearly the full allotment, must be considered as satisfactory, the more so as rather more than the whole of the above excess is for new works, the outlay on which has been 25,23,866 rupees, against 19,34,883 rupees in 1860–61, while that on repairs has been diminished by 15,442 rupees.

Outlay from local funds.

151. Besides the above expenditure of 47,55,622 rupees, there has been a large outlay from local funds. The whole of the returns have not yet been received from the several districts, but the total amount thereof may be roughly estimated at 2,50,000 rupees.

Expenditure incurred on account of establishments.

152. The amount of expenditure incurred on establishments and contingencies from the allotment of 17 lacs of rupees cannot, for want of the requisite statements from the local authorities, be included in this report, but it will be embodied in the "Annual Report of Progress and Expenditure" submitted for the Government of India.

Tabular statements of expenditure.

153. Subjoined are the usual tabular statements of expenditure upon "New Works" and "Repairs," from Imperial funds, and following the same is a detailed account of the operations of the department in each district during the year under review:—

Expenditure upon New Works during the Year 1861–62.

DISTRICTS.	Irrigation Works.	Communications.				Buildings.							Total.
		Roads and Bridges.	Navigable Canals.	Ports and Harbours.	Ferry Boats.	Military.	Revenue.	Public.	Judicial.	Ecclesiastical.	Marine.	Educational.	
	Rs.	*Rs.*	*Rs.*	*Rs.*		*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*		*Rs.*
Ganjam - -	16,752	68,783	–	–	–	- -	4,550	840	3,577	–	–	–	94,502
Vizagapatam -	15,955	22,826	–	–	–	3,115	5	577	4,274	4,235	–	–	50,987
Upper Godavery -	- -	3,57,260	–	–	–	- -	- -	- -	–	–	–	–	3,57,260
Godavery - -	99,285	7,286	17,261	*55,378	–	762	- -	- -	258	–	–	–	1,80,230
Kistna - -	1,29,678	31,785	–	–	–	- -	- -	4,959	4,194	1,320	–	–	1,71,936
Nellore - -	94,504	33,795	–	–	–	- -	277	1,968	380	–	12	–	1,30,936
Cuddapah - -	23,533	1,16,690	–	–	–	- -	- -	168	–	–	–	–	1,40,391
Bellary - -	8,991	7,318	–	–	–	1,00,563	804	171	–	–	–	–	1,17,847
Kurnool - -	- -	26,957	–	–	–	307	10,135	- -	–	2,518	–	–	39,917
Madras - -	24,629	725	6,674	–	–	37,624	9,779	3,470	175	3,124	2,984	–	89,184
North Arcot -	50,532	50,189	–	–	–	43	114	440	1,101	393	–	–	1,02,812
South Arcot -	37,239	30,586	–	–	–	- -	- -	559	–	–	–	–	68,384
Tanjore - -	4,562	13,442	–	–	–	- -	1,063	661	–	74	298	–	20,100
Trichinopoly -	27,142	76,876	–	–	–	2,309	- -	3,948	117	–	–	–	1,10,392
Madura - -	3,602	76,640	10,262	–	–	- -	261	2,239	702	–	–	–	93,706
Tinnevelly - -	5,473	44,776	–	–	–	- -	3,067	953	–	–	–	–	54,269
Coimbatore - -	1,288	17,470	–	–	–	- -	26	633	27,710	–	–	–	47,127
Salem - -	1,159	18,033	–	–	–	- -	5,964	2,171	22,636	–	–	–	50,963
North Canara -	- -	52,462	–	15,105	–	- -	1,002	120	528	–	–	–	69,217
South Canara -	- -	9,512	–	–	–	1,736	4,971	507	536	–	–	–	17,262
Malabar - -	- -	1,08,023	3,015	–	–	10,525	- -	1,627	3,693	357	–	–	1,27,240
Presidency - -	332	63,766	–	2,757	–	69,869	4,345	85,482	10,546	7,020	–	–	2,44,117
Bangalore - -	- -	349	–	–	–	- -	1,23,975	389	–	–	–	–	1,24,713
Wellington - -	- -	- -	–	–	–	17,762	- -	- -	–	2,812	–	–	20,574
Total - *Rs.*	5,45,656	12,35,549	37,212	73,240	–	2,44,615	1,70,338	1,11,882	80,427	21,853	3,294	–	25,24,066

* Inclusive of 22,000 rupees expended on the Paumben steam tug.

EXPENDITURE upon Repairs during the Year 1861-62.

DISTRICTS.	Irrigation Works.	COMMUNICATIONS.				BUILDINGS.							TOTAL.
		Roads and Bridges.	Navigable Canals.	Ports and Harbours.	Ferry Boats.	Military.	Revenue.	Public.	Judicial.	Ecclesiastical.	Marine.	Educational.	
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
Ganjam - - -	11,808	35,681	214	–	95	194	7,173	262	154	–	335	–	55,916
Vizagapatam - - -	6,906	23,018	–	–	40	3,559	1,868	370	486	734	12	2,000	38,993
Upper Godavery - -	—	—	—	—	—	—	—	—	—	—	—	—	—
Godavery - - -	2,29,089	17,398	65,758	–	1,028	2,222	2,290	2,354	923	44	100	–	3,21,206
Kistna - - - -	92,852	19,576	–	–	–	248	6,141	1,092	245	102	243	–	1,20,499
Nellore - - - -	39,993	48,757	621	–	9	–	487	180	365	115	43	–	90,570
Cuddapah - - -	24,606	63,318	–	–	–	190	1,658	3,211	1,897	700	–	–	95,580
Bellary - - - -	48,659	77,600	–	–	–	8,216	2,921	1,590	463	207	–	–	1,39,656
Kurnool - - -	17,221	26,723	–	–	–	291	1,286	–	–	–	–	–	45,521
Madras - - - -	37,503	1,06,206	19,627	89	–	12,151	200	5,103	1,602	454	–	–	1,82,935
North Arcot - - -	40,630	45,018	–	–	–	5,070	383	707	788	34	–	–	92,630
South Arcot - - -	56,697	56,305	–	–	–	–	–	2,603	–	–	–	–	1,15,605
Tanjore - - -	1,14,286	43,678	313	1,604	52	85	13,960	390	1,500	–	–	–	1,75,868
Trichinopoly - - -	62,853	34,677	–	–	7	4,620	244	1,272	293	–	–	–	1,03,966
Madura - - -	32,501	12,960	1,924	–	–	–	1,752	1,096	545	–	–	–	50,778
Tinnevelly - - -	49,373	43,190	–	–	–	286	622	158	515	1,023	–	–	95,167
Coimbatore - - -	36,461	72,044	–	–	–	155	1,368	683	119	161	–	–	1,10,991
Salem - - - -	28,431	77,650	–	–	–	333	348	968	145	12	–	–	1,07,887
North Canara - -	- -	60,520	–	–	–	–	4,765	–	–	37	1	–	65,323
South Canara - -	- -	28,898	–	–	–	552	1,876	2,172	428	165	–	–	34,091
Malabar - - -	6,651	21,429	300	402	–	8,494	3,479	5,194	1,374	271	375	–	47,969
Presidency - - -	874	13,728	–	–	–	27,304	1,869	24,547	5,844	2,741	106	–	77,013
Bangalore - - -	- -	5,320	–	–	–	7,792	48	–	–	20	–	–	13,180
Wellington - - -	- -	6,084	–	–	–	16,932	–	–	–	–	–	–	23,016
Municipal Commissioners	- -	27,397	–	–	–	–	–	–	–	–	–	–	27,397
TOTAL - - - *Rs.*	9,37,394	9,67,175	88,757	2,095	1,231	98,694	54,738	53,952	17,686	6,820	1,215	2,000	22,31,757

GANJAM.

Summary of expenditure.

154. The expenditure in this district during 1860–61 amounted to 1,50,418 rupees, under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	16,752	11,808
Communications - - - - -	68,783	35,990
Buildings - - - - - -	8,967	8,118
TOTAL - - - *Rs.*	94,502	55,916

New works of irrigation.

155. The only new works of irrigation requiring notice are the Boary reservoir and channels in Gumsúr, and the construction of a regulating sluice and new head to the Julnoor channel.

Progress made with works of irrigation.

156. The first work was completed in February last at a total cost of 9,499 rupees, of which 7,824 rupees were expended during the past year. The reservoir is considered to be a perfect success, and already pays 11½ per cent. on the outlay; while the channel leading therefrom secures irrigation to a large tract of country and cannot fail to be of the greatest benefit to the ryots.

Progress made with works of irrigation.

157. On the second work, which has also been completed, the expenditure amounts to 4,266 rupees.

Minor new works.

158. Of minor new works of irrigation, fourteen calingulahs and twenty-eight tank sluices have been built at a cost of 4,485 rupees.

New works of communication.

159. Under the head of communications the following new works have been completed:—

	Rs.
1. Improvements to road from Chicacole to Calingapatam, 16 miles in length - - - - - - - - -	4,919
2. Trunk Road No. 6, from Caseeboogah to Dendagedda, near Itchapoor, 28½ miles - - - - - - - -	30,346
3. Road from Mojagadah to Sunkeracole, 8 miles finished, 14 miles in progress - - - - - - - - -	8,828
4. Clearing road traces in the Gumsúr jungle, 22 miles in length	2,199
5. Ditto in connexion with proposed new road from Aska *viâ* Bulleapudra and Bellagoonta to Russelcondah, with branches to Kurcholy and Jugganathpersad - - - - -	1,695

Outlay on trunk road No. 6.

160. There has also been an outlay of 18,721 rupees on trunk road No. 6 from Nowpadah to Caseeboogah, 18 miles in length.

Principal new buildings.

The principal new buildings in hand were the following:—

	Rs.
Thasildar's Kacheri at Chicacole	4,260
Police Kacheri at Aska	1,779
Police Station House at Teckally	898
Do. do. Sompetta	900

Progress made with new buildings.

161. These works have all been finished, and 840 rupees have also been laid out in the construction of chuttrums on the Gumsúr maliahs.

Repairs to irrigation works and communications.

162. With regard to repairs 11,808 rupees were expended on 145 tanks and channels, and 15 miles of river embankment, and for 35,990 rupees, 260 miles of road have been maintained generally in good order, notwithstanding the long continuance of the last monsoon.

Value of improved communications.

163. The full value of the improved communications is felt in this district. Wherever roads exists the salt trade is now carried on all through the monsoon; and during the past year there was an increase of upwards of a lac of rupees in the salt revenue, as compared with the preceding year.

Repairs to public buildings, &c.

164. Public buildings of various kinds, as well as numerous salt pans with their channels, bunds and platforms, have been repaired at a cost of 8,118 rupees.

Prices of labour and material.

165. The cost of labour and material continues to be moderate, and a good feeling prevails throughout the district towards the department.

Prosperous condition of country.

166. At present the country is in a very prosperous condition. Last year the revenue derived therefrom was 21 lacs; this year it is expected to rise to 23 lacs.

Public works in Kimedy.

167. The public works in the Kimedy zemindary have, as usual, been conducted under the control of the district engineer. The expenditure for the year amounts to 40,894 rupees. A special report regarding this outlay will be furnished to the court of wards at the end of the current fasli; but it may be well to mention here, that the works carried out have had a most beneficial effect, and that the revenue of the zemindary has largely increased.

Progress made with proposed road from Sunkeracole to Sonapore.

168. Besides the ordinary works of the district, the district engineer's attention has also been directed to the trace and survey of the proposed new road from Sunkeracole to Sonapore, in the Bengal territory.

Unhealthiness of season.

169. Owing to the lateness of the rains and the unhealthiness of the season, the progress made by the company of sappers and miners employed on this work has been less favourable than was anticipated. After surveying the line, and cutting a good portion of the new trace through the Komackole ghaut, the company were compelled in consequence of frequent attacks of fever to return to Russelcondah. The sum expended on the work amounted to 4,120 rupees.

VIZAGAPATAM.

Expenditure.

170. The total expenditure incurred on public works during the year 1861–62 has been 89,980 rupees, viz.:—

	NEW WORKS.	REPAIRS.
	Rs.	Rs.
Irrigation	15,955	6,906
Communications	22,826	23,058
Buildings	12,206	9,029
Total - - - Rs.	50,987	38,993

Irrigation new works.

171. Of irrigation new works the principal have been those in connexion with the Gubbada River, and the Calavalapillay Pedda Gedda.

Gubbada works.

172. The Gubbada works, which consist of an anicut head and surplus sluices, with supplying channel therefrom, are sufficiently advanced to allow of the water being admitted for irrigation as far as Neelampett, two miles by the new channel, and thence to Nursipatam through the whole channels. The expenditure in the year amounts to 10,674 rupees, for which sum the anicut has been nearly completed, and the other masonry works fully so.

Dam across the Calavalapillay Pedda Gedda.

173. Of the dam across the Calavalapillay Pedda Gedda, 1,505 rupees have been expended in completing the foundations.

Outlay on minor new works.

174. The other works of irrigation undertaken were of minor importance, and comprise small calingulahs, sluices, &c., costing in the aggregate 3,615 rupees.

Outlay on salt pans.

175. On the salt pans of the district there has been an expenditure of 1,350 rupees.

Communications, new works.

176. Under the head of communications, the following were the principal new works executed:—

	Rs.
1. Improving road from Ankapillay on trunk road No. 6, to the ferry landing place near Vizagapatam - -	5,363
2. Ditto - branch road between Vizagapatam and Vamlavalsa	3,370
3. Ditto - road from Kotur to the Harris Valley at Galipurvatum - - - - - - - - - -	728
4. Constructing road from Vizianagrum to Jeypore - - -	4,564

Progress made with new works.

177. The first three works have been completed, but further improvements are required to place them in good order.

Progress made with new works.

178. As repects the fourth work, it is observed that there are two roads which go under the name of the "Jeypore Road," viz., one from Vizagapatam and the other from Vizianagrum, both of which will meet at Bodara, and from thence form one line to Jeypore. The first-mentioned line has been cleared to its full width of ten yards for a distance of 37½ miles, or a mile beyond Bodara, so as to admit of its being used for traffic. His Highness the Rajah of Vizianagrum has liberally contributed 9,000 rupees towards this work, of which 5,790 rupees have been laid out on it; besides this amount, a sum of 246 rupees has been expended from the discretionary allowance for roads in the preliminary operations of surveying and tracing, making 6,036 rupees in all. For marking out the line between Kotur and Jeypore, 377 rupees have been spent out of a grant by Government of 1,000 rupees.

Outlay on repairs, &c. to road between Kotur, and Gali Kondah.

Liberality of his Highness the Rajah of Vizianagrum.

179. A sum of 816 rupees has also been expended from funds given by the Rajah of Vizianagrum, on repairs and improvements to the road between Kotur and Gali Kondah. His Highness has also most liberally offered 50,000 rupees towards the construction of a road from Vizianagrum to Jeypore *viâ* Rayavalsah, to meet the Vizagapatam road at Bodara, an offer which has been accepted by the Government, and the work will be carried out during the current official year.

Repairs of district roads.

180. All the roads in the district for which there are maintenance allowances have been repaired. Good roads are said to be much required to the several salt pans, which being necessarily situated in the lowest parts of the district, are very difficult of access during the monsoon, and for some months after it.

Buildings, principal new works.

181. The principal works in progress under the head of buildings were the following, all of which have been completed:—

	Rs.
1. Converting a building at Vizagapatam into a police kacheri -	2,414
2. Constructing a new burial-ground at Waltair - - - -	2,907
3. Additions, &c., to the arsenal at Vizagapatam - - - -	1,166
4. Erecting standards in the grand magazine at Vizagapatam -	796
5. Repairs to Sebundy Barracks at Nursapatam - - - -	794
6. Ditto to Sebundy Hospital at ditto - - - - -	643
7. Enlarging the cemetery at Vizianagrum - - - - -	735

Cost of labour and materials.

182. The prices of labour and materials remain about the same as last year. Good bricks are seldom procurable; and it is considered that stone, which is abundant in most parts of the district, might be substituted with great advantage to the works, both as regards durability and economy.

UPPER GODAVERY.

Amount of expenditure.

183. The actual expenditure incurred during the past year for the works on the Upper Godavery amounts to 3,57,260 rupees exclusive of advances.

Principal object of the operations of the past year.

184. The principal object of the operations of the past year has been the formation of a connected line of land and river transit between the coast and the Nagpore districts, by means of tramroads round the barriers, and steamers in the navigable reaches between them. It was hoped at the commencement of the year that the line would be completed and opened by June; but in consequence of the constant prevalence of fever among the workpeople, this hope will be but partially realised.

Steamers placed above each barrier.

185. The first thing done was to place steamers in the reach above each barrier; by taking advantage of a succession of unusually high floods, the steamer "May Flower" was warped over 30 miles of rock to the top of the third barrier by the 4th of September last. She then proceeded to Hinginghat, and subsequently returned to the barrier, where she now remains awaiting the first freshes of this year.

Result of steamer taken over the third barrier.

186. While the "May Flower" was ascending the third barrier, the "Queen," a steamer of greater power, was taken over the second barrier, and after sundry exploratory trips was finally moored off Sironcha during the dry weather.

Accident to the "Arthur Cotton" steamer.

187. Above the first barrier it was intended to station the "Arthur Cotton" steamer, but owing to an accident which she met with after passing the barrier, it was found necessary to send her to Dowlaishwaram, where she remains in readiness for the operations of the next season.

Two new steamers launched during the year.

188. During the year, two new steamers, one of 200 I. H. P. and a speed of 10 miles, the other of 60 I. H. P., drawing only 14 inches, and when worked to full power, a speed over nine miles, have been launched for navigating the river during the low water season.

Progress made with works at the first barrier.

189. The preliminary surveys of the three lines of tramroad were commenced during the monsoon, and in November and December ground was broken at the first and second barriers. In October there were at one time, at the first barrier, 1,200 coolies, besides skilled workmen, and in December 1,000 at the second barrier; but with the cessation of the heavy rains fever broke out all along the river, and in one week 600 of the men employed at the first barrier fled to their villages. Almost every European was also attacked, and several, besides East Indians, were compelled to leave the district.

Ditto - second barrier.

190. At the second barrier, a great portion of the coolies from the surrounding country, and every subordinate, both European and native, suffered from fever; but owing to the determined devotion to his duty of Mr. McGregor, the sub-engineer in charge, better progress was made with the works than had been accomplished at the first barrier.

Ditto - third barrier.

191. At the third barrier, but little was done, Lieutenant Roberts, with his assistant and workpeople, having been prostrated by fever.

Fever has been the great difficulty during the year.

192. As above remarked the fever, which has continued up to the present time, has proved to be the one great difficulty of the year. It has nullified many of the calculations, greatly added to the expense of the operations, and prevented the accomplishment of more than one-half of what might otherwise have been performed.

Particulars of progress made at the three barriers.

193. The actual progress made at the three barriers has been as follows:—

First barrier, earthwork of eight miles completed. Sleepers laid down on six miles of road. Rails (wooden) on one mile.

Second barrier, earthwork of about 13 miles finished. Sleepers laid down on nine miles of road. Rails on 2½ miles.

Third barrier, earthwork of six miles completed.

Blasting operations between the first and second barriers.

194. Blasting operations have also been carried on about half way between the first and second barriers, and a small quantity of rolling stock has been got ready for working the lines when completed.

Anicut and lock at the first barrier.

195. Besides the above, the construction of an anicut and lock at the first barrier has been undertaken during the year; but as only such surplus labour as could not be used on the tramroads was employed on these works, the progress made has on this account, as well as in consequence of fever as abovementioned, been on the whole but trifling.

Progress made with the anicut.

196. About 600 cubic yards only of rubble have been built in the "shoot" of the anicut, and a little of the cut-stone coping laid. The stone facing to the bank of island next the anicut has been commenced.

Progress made with the lock.

197. About 500 tons of stone have been quarried for the anicut lock, and a tramroad completed for depositing it at the site of the work.

Work done to river bank.

198. About three-quarters of a mile of river bank on the island, and one mile on the main land, have been completed.

Efficient state of workshops.

199. The workshops have been brought into a more efficient state by the present superintendent, Mr. Vanstavern.

Work done at the canal round the first barrier.

200. On the canal round the first barrier, the only work done, besides sundry preliminaries, has been the excavation of about 100,000 cubic yards of earth, which has been thrown up to form the bank over which the tramroad passes for a length of two miles, half way between Dumagúdíen and Budrachellum.

Little progress made with works for the improvement of the river.

201. The works for the improvement of the river have made but littls progress, owing to the officer entrusted therewith having been detached during the monsoon months to conduct the exploration of the Wurdah and Wyne Gunga rivers.

Success attending the exploring expedition.

202. The exploring expedition was very successful. Besides examining the Wurdah up to Hinginghat, the Kanhan and Wyne Gunga rivers were explored from Kamptee to the junction with the Wurdah, and the general result of those investigations is, that the Wurdah is found to be well adapted for navigation, but that the bed of the Wyne Gunga abounds in rocks to such a degree as to make it doubtful whether it can ever be turned to account for the purposes of commerce.

Groynes at Rudramcota, &c.

203. At Rudramcota a groyne commenced last year is being lengthened to 800 yards. A second groyne has also been commenced four miles lower down the river, and the removal of detached rocks in the bed of the river at that part is in progress. The same is the case at Albaca, half way between the first and second barriers.

Work done by sappers stationed at Rudramcota.

204. A company of sappers has been stationed at Rudramcota, but as they only arrived in January, they have not done much beyond hutting themselves.

205. The

Price of labour, &c., and cost of work performed.

205. The earthwork, done chiefly by daily labour, has been very expensive, having cost from 3 to 3½ annas per cubic yard; but latterly the cost has been more moderate, and Captain Haig considers that 2 annas per cubic yard is likely to be the rate at which a large part of the canal earthwork will be executed.

Cost of work performed at the anicut.

206. The work performed at the anicut has also proved expensive, owing to the heavy charge which attended the carting of lime for a distance of 17 miles.

Effect of the levy of taxes.

207. The levy of taxes has affected the cost of all jungle produce, particularly that of timber, which has risen nearly 100 per cent. since November last.

Line between Chandah and the coast.

208. Preparations are making for working the line between Chandah, or Hinginghat, and the coast, as soon as there is a possibility of opening the line for traffic, which it is hoped may be done by the end of June next.

GODAVERY.

Expenditure.

209. The expenditure in this important district during the past year amounts to 5,01,436 rupees (inclusive of 45,956 rupees on the Kistna portion of the high level canal to Ellore) under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - - -	99,285	2,29,089
Roads and bridges - - - -	7,286	17,398
Canals - - - - - - -	17,261	65,758
Ports and harbours - - - -	33,378	—
Fitting up Paumben steam tug - -	22,000	—
Ferry boats - - - - - -	- -	1,028
Buildings - - - - - -	1,080	7,933
TOTAL - - - *Rs.*	1,80,290	3,21,206

Principal new works of irrigation and navigation.

210. The principal new works of irrigation and navigation combined undertaken, was the high level canal to Ellore, from the Wyairoo on the one side, and the village of Perikeed in the Kistna district on the other. On the first portion, the masonry works have been pushed on as rapidly as possible, and all are expected to be shortly completed. On the second portion, a lock 150 by 20, and its adjacent weir, 60 feet long at Ellore, with several tunnels, have been nearly finished, and are expected to be completely so by the end of May; but owing to the scarcity of labour available, the population of this part of the country being but scanty, the progress of the excavation of the canal has been retarded. Efforts are, however, being made to procure more labour, and every exertion will be used to have the canal re-opened for traffic as far as the river Tamelairoo, before the next heavy rains set in.

Aqueduct over the Tamelairoo.

211. The excavations for the foundations of an aqueduct, which is to carry the canal over that river, are in a forward state, 500 persons being engaged thereon; and the construction of the work will probably commence in the course of another month. The total sum expended on both portions of the canal was 63,926 rupees.

Outlay on main line of irrigation and navigation in the central Delta.

212. The next works in point of importance undertaken, have been the completion of the main line of irrigation and navigation in the central Delta and the Amlapur canal. On these 14,888 rupees have been expended chiefly in various masonry works, consisting of an aqueduct, locks, calingulahs, &c.; 5,979 rupees have also been laid out on the extension of the Amlapur canal itself, from Nadipudi to the head of the Bendamoor Lunka canal. On the completion of this junction before the setting in of the monsoon, one of the richest tracts in the whole Delta will have the benefit of cheap water communication with the rest of the Delta and with the ports.

Minor works of irrigation.

213. The other works of irrigation in progress were of minor importance, and do not require to be particularized.

New works of communication.

214. Under the head of communications in progress may be noticed the towing path of the Nagarum aqueduct, and the bridge at its head. The total expenditure on this work amounts to 22,000 rupees, of which 7,286 rupees were spent in the year under review, and the whole work has been finished with the exception of the iron railing to the towing path, which has yet to be fixed in position.

Junction canal from Samulcottah to Cocanada.

215. The junction canal from Samulcottah to Cocanada is another important communication, on which 8,428 rupees have been expended in the construction of three calingulahs in connexion with locks.

Head of the Rally main channel.

216. The last new work under the head of communications which calls for notice, is the improvement of the head of the Rally main channel. On this work the expenditure has been 5,837 rupees, and it is expected to be completed within three months.

Shoals in the river between Dowlaishwaram and the entrance to the hills.

217. The most important point under the above-mentioned head of communications, is the successful manner in which the shoals in the river between Dowlaishwaram and the entrance to the hills have been managed. There has been no interruption to the passage of the steamers "Hope," "Arthur Cotton," "Little Neil," and "Pioneer," the whole of which have been employed throughout the season in towing stone boats from the Poorabatputnam quarry, a distance of 25 miles. The outlay has been 3,018 rupees, or about 120 rupees per mile.

Outlay under the head of ports and harbours.

218. Under the head of ports and harbours, 33,377 rupees have been expended in the construction of a light-house, the erection of a flagstaff, and on improvements to the river at Cocanada. In carrying out the latter work, one of the sea dredges sent to the district has been constantly employed, together with one of Blythe & Co.'s steam tugs. This vessel, in addition to towing the spare boats, was turned to good account in February last, in recovering from the wreck of a French ship, cast on the shore, property to the value of 30,000 rupees; and again in March following, in towing out of imminent danger another French vessel, with a cargo on board worth 70,000 rupees.

Value of work performed in the workshops.

219. The workshops have this year been actively employed, the total value of work performed in them amounting to 1,76,092 rupees, or 18,191 rupees in excess of the previous year. Two steamers, the "Prince," and "Hope," have been turned out, and a third nearly put together for use at the Paumben passage. Four canal dredges, 16 iron punts, one large iron boat, and a great deal of work for the Upper Godavery, have also been executed.

Quantity of stone quarried.

220. In the quarries, 74,868 tons of stone were excavated, at a cost of 35,860 rupees. Five channel steam dredges have also been employed from time to time, the work of which amounted to 46,381 cubic yards, at a cost of 10,423 rupees.

Expenditure on repairs to irrigation works.

221. Owing to violent storms and floods in July and September last, the outlay on account of repairs has been large. On irrigation works alone it amounted to 2,29,089 rupees, or about 6¾ per cent. on the land revenue, and of this sum, 46,457 rupees, or about 5 per cent. on its first costs, were expended on the anicut and head works damaged during the freshes of last year; that of July 1861 being nine feet higher than the average of of any July fresh, and six feet higher than that of any September fresh for ten years previous.

Condition of anicut.

222. The anicut has been thoroughly examined and repaired, and is in good order. The river embankments have also been repaired, strengthened and raised, so as to be at least half a yard above the highest flood.

Expenditure on trunk road from Toonee to Ellore.

223. Towards improving the trunk road from Toonee to Ellore, 9,065 rupees have been expended in collecting materials.

Value of traffic passing through the head locks.

224. The value of traffic passing through the head locks during the past year, has not been so great as it was in the previous year, owing to the length of time communication was suspended in all the Deltas, but particularly in the western, by the effects of the floods on the canals.

Unfavourable season.

225. The season was unfavourable, generally, for the Delta taluqs, on account of the unusually heavy floods and rains, the amount of the latter being 44·4 inches.

Amount of revenue collected.

226. The collection of the revenue within the year does not therefore show so favourably as that in 1860–61, having fallen short by 2,71,470 rupees. Of this, however, 54,439 rupees have since been paid, and of the remainder 55,315 rupees is due to the abolition of the moturpha duties, 50,242 to diminished sea customs' dues owing to smaller exports, 12,500 to the cessation of export of seeds through the French territory of Yanam, and 30,023 rupees to smaller sales of salt owing probably to the enhanced duty.

Value of exports and imports.

227. Owing to the high prices of grain, the exports of rice and paddy have been much less, and the total exports fall short of those of the previous year by 10,85,513, while the imports have increased by 66,064, the relative amounts being 31,29,232 rupees, and 7,07,573 rupees, in both cases, exclusive of treasure, the imports of which have been 11,16,031 rupees, and the exports 1,36,850.

Customs dues on imports.

228. The customs dues for exports are less by 55,000 rupees, while those from imports have increased from 2,796 to 8,559.

Expenditure from local funds.

229. Out of the local funds, 4,600 rupees have been expended in the construction of a good road for carts, between Gunnearum and Ambojeepett, in the Amlapur taluq, and from Kotipillay towards Cocanada, in the Ramachendarapooram taluq.

KISTNA.

Progress made with the works considered to be satisfactory.

230. Although the usual delays and inconvenience occasioned by a deficiency of labour have been experienced, the progress made during the past year, in this district, with the execution of public works, is on the whole satisfactory.

Analysis of expenditure.

231. The expenditure, exclusive of local funds, amounts to 2,92,435 rupees, viz. :—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	1,29,678	92,852
Communications - - - - -	31,785	19,576
Buildings - - - - - -	10,473	8,071
TOTAL - - - *Rs.*	1,71,936	1,20,499

Irrigation new works.

232. The principal irrigation works undertaken were—	*Rs.*
1st. The high level canal from Bezoarah to Perikeed - - -	7,471
2d. Two channels in the Eastern Delta, or Captain Ryves' Channels	33,385
3d. The Masulipatam Canal - - - - - - -	35,753
4th. The main channels for four miles from Seetanagrum - -	12,288
5th. The Nizampatam Canal - - - - - - -	26,243

Progress made with works.

233. The portion of the first work within the limits of the Kistna District has been opened during the year, but in consequence of non-completion of the subsidiary works required to regulate the height of water, there has been but little traffic on it. Another masonry work is required across the canal, where the slope of the bed changes from four inches to half an inch per mile; and this important communication will then be effective throughout its whole length, in the Kistna District.

Progress made with "Ryves" Channels.

234. Water was admitted into "Ryves" Channels late in October, though they were incomplete; but owing to the fall of rain in November, the effect was not so great as it would have been in an ordinary season. The works are now well advanced, and will come into full operation during the ensuing season.

Work performed on the Masupilatam Canal.

235. On the Masulipatam Canal, a lock has been built at Aukumurru, and another (a tidal lock) commenced immediately eastward of the fort ditch. A small irrigation sluice has also been built, and 5,752 rupees laid out in excavations.

Main channels from Seetanagrum.

236. The main channels from Seetanagrum, situated in the Guntoor Delta, have been much improved; and on the Nizampatam Canal, the lock at Kutchipudy has been completed, and a second lock, for which a large quantity of materials has been collected, is now in progress at Yintur.

Repairs to irrigation works.

237. Of the sum expended on repairs to irrigation works, 12,262 rupees were spent on the anicut and head works. During the year a considerable quantity of the rough stone-work of the anicut was removed by the violent action of the river; but the portion so injured is being repaired, and will be strengthened by the addition of party walls which have been found to answer well at other points where they have been constructed.

Works in the Delta not affected by the anicut.

238. The remainder of the outlay on irrigation repairs was on account of various works, both in the Delta and in the Taluqs, not affected by the anicut.

New works of communications.

239. The principal work under the head of communications has been the restoration of the road from Ibrampatam to the Nizam's frontier, which has been opened the whole of the way for traffic. The expenditure thereon amounts to 16,481 rupees, and there is a fair prospect of the work being completed this year. A continuation of the same line from Ibrampatam to Bezoarah, and from the latter place to Masulipatam, has also been improved, and several other roads have had attention paid to them.

Progress made with new works of communications.

240. Two large and three small bridges have been nearly completed. The expenditure on the former description of works amounted to 18,436 rupees, and on the latter to 13,135 rupees.

Minor communications of the district.

241. The minor communications of the district have also been improved to a considerable extent, with the aid of the local funds, the disbursements from which source amount to 31,647 rupees.

Military buildings.

242. Under the head of Military Buildings, two soldiers' rest-houses have been built at Bezoarah and Shair Mahomed Pettah, at a cost of 2,724 rupees.

Outlay on police buildings.

243. Rupees 3,232 have also been laid out in the purchase of materials for the new police buildings sanctioned for the district.

Traffic through the head locks at Bezoarah, &c. and Seetanagrum.

244. The traffic through the head locks at Bezoarah and Seetanagrum has fallen off to a considerable extent, the high state of the river in the months of July, August, and September, together with the force of the stream and the unfavourable direction of the wind, having rendered it difficult for dhonies to ascend the river above the anicut. At

the same time a comparison of the returns of traffic at the first locks below Bezoarah on the Masulipatam and Ellore Canals, with those which passed the lock at Bezoarah, shows a large excess in favour of the former.

Canal to Masulipatam.

245. The opening of the canal to Masulipatam has already had a beneficial effect on the trade of that port, and the traffic at Nizampatam is also increasing.

Effect of the season.

246. The season has been a most favorable one for the Delta Taluqs, and in these the harvest has been an unusually fine one; but in the non-Delta Taluqs the rice crops under some of the tanks withered for want of a sufficient supply of water.

Amount of revenue realised.

247. The revenue realised during the past year from wet and dry lands irrigated from the Kistna Channels, amounted to 4,70,431 rupees, or 63,286 rupees in excess of the preceding year, and is an increase of 3,34,749 rupees over the annual average, prior to the construction of the anicut.

NELLORE.

Expenditure.

248. The amount expended on public works in this district during the past year was 2,21,506 rupees, under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	94,504	39,993
Communications - - - - -	33,795	49,387
Buildings - - - - - -	2,637	1,190
TOTAL - - - *Rs.*	1,30,936	90,570

Pennar anicut.

249. The principal new work of irrigation was the Pennár anicut, which, with the exception of the levelling of a few square yards of the apron at the northern end has been completed. The expenditure during the year amounts to 34,794 rupees, and the works performed consisted of the construction of additional under sluices at the north end, and increasing the width of the apron from 40 to 80 yards.

Channels connected with the anicut.

250. On the channels connected with the anicut, the outlay was 32,658 rupees. The work done will have an important effect on the irrigation of the present year. During the past year, the lands at present under the influence of the anicut were sufficiently watered, notwithstanding unusually scanty freshes, and a generally deficient monsoon, and the benefit derived from that work is reported to have been a saving in actual revenue, of from one-third to one-half of the cost of its construction on the revised section.

Improvement effected in the bed of the river above the anicut.

251. Considerable improvement has been effected in the bed of the river above the anicut, by the construction of two stone groynes, at a cost of 3,652 rupees.

Outlay on important main channels.

252. On two important main channels, which have their heads at Sungum, 20 miles west of Nellore, regulating sluices have been built, one at the head of the Duvur tank supplying channel, at a cost of 2,968 rupees, and one at the head of the Gundavaram channel, at a cost of 4,362 rupees.

Outlay on Kalavoy tank.

253. At the Kalavoy tank, one of the most important reservoirs of the district, 3,353 rupees were expended in restoring the revetment of the inner face of the bund, destroyed by the cyclone of 1857.

Minor new works.

254. Of minor new works, 26 calingulahs and 10 sluices have been completed during the year, at a cost of 6,215 rupees; and on 16 calingulahs yet in progress, 3,676 rupees were expended.

Outlay on minor tanks.

255. The annual maintenance of the minor tanks has cost 39,993 rupees. Most of these works are now in serviceable order, but a considerable outlay is yet required to secure them from a recurrence of the damage effected by the storms of 1856 and 1857, and the floods of 1859.

Particulars of expenditure on roads and bridges.

256. Of roads and bridges, the following are the most important on which expenditure has been incurred:—

	Rs.
1st. The Kota and Dugurazapatam road - - - - - -	16,509
2d. Trunk road, No. 6 - - - - - - - - -	1,393
3d. Nellore and Dorenal road - - - - - - -	5,208
4th. Cotton road from Cumbum to Kotapatam, *viâ* Ongole - -	9,386

257. On the first road, the length of which is about 20 miles, 16 miles have been nearly completed.

Progress made with roads and bridges.

258. On the second road, a bridge and a few small tunnels and road dams were constructed.

Progress made with roads and bridges.

259. The third road was commenced in December last, and up to the end of April two miles of road have been metalled; a road dam of 150 yards in length, with a small culvert, built, and materials prepared for other masonry works. The ghât over the Sungum Hill has also been much improved.

Progress made with roads and bridges.

260. On the fourth road, the first eight miles east of Ongole have been repaired, and on the portion west of that station, two small masonry works have been built, and materials for others collected.

Progress made with roads and bridges.

261. The maintenance of the completed portions of the main roads of the district has been well attended to, and their condition is represented to be good. Where incomplete, provision was made for such repairs as tended to facilitate traffic. Hitherto but little benefit has resulted from the outlay of former years on these lines of communication, owing to their liability to be closed to traffic at any moment for want of bridges and metalling, but efforts are being made to remedy this evil, and if sufficient funds are forthcoming, it is expected that in the course of three years their condition will be greatly improved.

Maintenance of main road of the district.

262. The value of work executed from the local funds amounts to 15,219 rupees, for which sum several small masonry works have been constructed, and the minor communications of the district improved.

Value of work performed from local funds.

263. The rates of labour and prices of material have increased considerably in all parts of the district, particularly in the eastern taluqs, owing chiefly to the greater demand for labour caused by the extension of cultivation, and to the rise which has taken place in the price of food.

Rates of labour and material.

264. The monsoon of the year under review was decidedly unfavourable. The supply of rain was insufficient for the requirements of the district, and in the north-west division the monsoon lasted only one day; the rain which fell during that time having reached the hitherto unprecedented amount of 15 inches, causing floods which breached trunk roads Nos. 6 and 7, for a distance of about 12 miles, and several important tanks.

Monsoon unfavourable, supply of rain deficient.

CUDDAPAH.

265. In this district the total expenditure during the past year amounted to 2,35,971 rupees, viz.:—

Expenditure.

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	23,533	24,606
Communications - - - -	1,16,690	63,318
Buildings - - - - - -	168	7,656
TOTAL - - - *Rs.*	1,40,391	95,580

266. The principal new works of irrigation have been the restoration of the Chinna Orampaud, Mutialcherru and Anantaraz tanks. On the first work the expenditure has been 1,966 rupees; on the second, 9,028 rupees; and on the third, 11,251 rupees; and every exertion is being made to complete the works as soon as possible.

New works of irrigation.

267. On new roads the outlay has been 1,16,690 rupees, and the progress made is reported to be very satisfactory, and to have been attended with immense benefit to the community.

Outlay on new roads.

268. The greatest outlay, amounting to 23,944 rupees, was made on the road from Royachoti over the Sanepoy ghât to the railway station at Rajampett. This road, though not yet completed, the trace over the ghât being as yet only four yards broad, was opened for traffic in November last, and is already very much used. When finished, it will prove an important feeder to the North West Railway, for it is the only road passable for wheeled conveyances over the range of hills extending from Cuddapah to Kirkumbady, a distance of 70 miles.

Road from Royachoti to the railway station.

New line from Royachoti to Punganoor.

269. Much has been done on the new line from Royachoti *viâ* Gurramkonda and Mudnapilli to Punganoor, by an expenditure of 21,144 rupees.

New line from Royachoti to Punganoor.

270. Formerly this road was the worst in the district, but now it is in tolerably good order, and is largely used by carts proceeding to Bangalore with cotton.

Road from Cuddapah to the Kurnool frontier.

271. The road from Cuddapah *viâ* Kazipett to the Kurnool frontier has been very much improved, at a cost of 15,000 rupees; but a large expenditure is still required to render it passable at all seasons of the year.

Road from Cuddapah to the Bellary frontier.

272. The line from Cuddapah to the Bellary frontier, along which a great quantity of cotton is sent, has been improved at a cost of 10,831 rupees. Although it runs parallel to the North West Railway, it will be of the greatest use for some years to come, as it will be long before the rail to Bellary can be opened.

Road from Cuddapah towards Madras.

273. The continuation of this road south of Cuddapah towards Madras has also been put in good order, by the expenditure thereon of 22,099 rupees.

Trunk road, No. XI.

274. On trunk road No. XI., the great line of communication between Cuddapah and Vellore, Arcot, and Madras, bearing a very heavy traffic, several bridges and tunnels have been in progress. The expenditure during the year amounts to 14,645 rupees.

Road from Cuddapah to the Nellore frontier.

275. And on the road from Cuddapah *viâ* Budwail to the Nellore frontier, 4,829 rupees have been expended, chiefly between Budwail and the top of the Dorenál Pass, a distance of nine miles; a new road has also been made between Yenagundlacotta and the railway station at Kodur.

Condition of existing lines of communications.

276. The made portions of existing lines of communications have been kept in good order, and metalling laid down as far as the sanctioned sum would admit, at a cost of 62,985 rupees; but a great deal more remains to be done, as there is not one road in the district metalled throughout. The principal outlay was on the following lines:—

	Rs.
1. Road from Cuddapah *viâ* Balpalli towards Madras - - -	6,949
2. Road from Cuddapah to the Bellary frontier - - - -	10,600
3. Road from Cuddapah *viâ* Budwail to the Nellore frontier - -	5,265
4. Trunk Road No. XI. from Cuddapah to Kullur - - -	14,000

Outlay on minor district roads.

277. The minor district roads have been improved at a cost of 9,846 rupees.

Outlay on buildings.

278. The expenditure under the head of buildings was chiefly on account of repairs, which do not call for special notice.

Repairs to works of irrigation.

279. The outlay, 24,606 rupees, on repairs to works of irrigation, scattered over an area of about 8,700 square miles, has been very much less than in preceding years, owing to both monsoons being very light, and also to the great attention paid to them by the department since 1857. Upwards of 66 tanks, five channels, six dykes, and four head sluices have been repaired or improved during the past year. The large tanks and anicuts are reported to be all in very good order, and ought not to need repair for the next 10 years. The repairs to those tanks which were injured by the storm of November 1859 have been completed.

Condition of nurseries.

280. Nurseries are kept in the compound attached to the overseer's bungalows in each taluq, and every endeavour is made, as far as the funds will allow, to plant avenues. The young trees, however, are often pulled up by travellers and villagers for firewood, or destroyed by cattle.

Failure of monsoon.

281. The monsoons of 1861–62 were a total failure; dry crops were grown under many of the large tanks, and in some villages there is a great scarcity of water, though much relief has been experienced by the great number of new wells sunk during the last five years. The prices of grain are higher than in the famine years of 1853–54 and 1854–55: but there is not much distress among the people, owing to the large expenditure on the North Western Railway, and also on public works.

Rates of labour and material.

282. From various causes the rates of labour and materials have increased from 25 to 50 per cent. during the past year. The lately imposed tax on wood has affected the price of bricks and chunam, whilst the great demand for wudders, for new wells and tanks, has raised the rates of stone, while the works connected with the North West Railway and Irrigation Company's Canals have created a demand for skilled labour which cannot be supplied.

BELLARY.

Summary of expenditure.

283. The expenditure in this district during the past year has been 2,57,503 rupees, under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	8,991	48,659
Communications - - - - -	7,318	77,600
Buildings - - - - - -	1,01,538	13,397
TOTAL - - - *Rs.*	1,17,847	1,39,656

Irrigation new works.

284. The principal new irrigation work in progress has been the improvements and extension of the Sirgoopah channel from the Toongabudra river; operations were commenced in December last, and since then the old channel has been widened and fair progress made with the extension. The expenditure on the work amounts to 4,905 rupees.

Principal works of communication.

285. With regard to communications, the chief outlay has been 21,852 rupees on the road from Bellary to the Cuddapah frontier. This line is being laid down as rapidly as possible, but the work is of necessity very slow and expensive. Several parts have, however, been reformed and improved, and it is anticipated that the amount, 28,500 rupees, sanctioned for the line will be all laid out within another three months.

Bridge across the Yettenhully.

286. A bridge of three arches has also been constructed across the Yettenhully at a cost of 7,318 rupees. The parapets and approaches alone remain to be completed.

Military buildings.

287. Military buildings in this district have, as in 1860-61, and the preceding year, absorbed a large portion of the funds placed at the district engineer's disposal.

Principal works under the above head.

288. The most important works in progress under this head were the following:—

	Rs.
1. New European hospital at Bellary - - - - - -	1,413
2. Married men's quarters at Bellary - - - - - -	50,061
3. Out-offices to the new European Hospital at Bellary - -	7,076
4. Temporary artillery barracks at Bellary - - - -	36,268
5. Improvements to the old hospital at Bellary - - -	3,068

Progress made with Nos. 1 and 5.

289. The first and fifth works have been completed at an aggregate cost of 99,615 rupees and 12,301 respectively, and the former was made over to the military authorities for occupation on the 1st August 1861.

Progress made with No. 2.

290. Three ranges of the married men's quarters, giving accommodation to 48 families, have been completed. Of these two are occupied, and the third will be given over immediately.

Progress made with No. 3.

291. The out-offices of the new European hospital have also been finished.

Progress made with No. 4.

292. At the temporary artillery barracks good progress has been made. Two ranges with out-houses, &c., have been completed, and are now occupied. The third range is being roofed.

Repairs to tanks.

293. The tanks in this district are reported to be generally in good repair, and very little damage was done in the last monsoon. The total number repaired has been 125, at a cost of 27,738 rupees. Twenty-nine channels and four anicuts have also been put in good order, the chief of which were the Toongabudra and Raupoor channels and the Walabapoor and Toombiganoor anicuts.

Repairs to roads.

294. The outlay on repairs to roads is rather large. The trunk road from the Mysore frontier near Hberial to the Dharwar frontier is in excellent order, but the last 40 miles of it are unbridged.

Condition of other lines.

295. Of the other principal lines some portions are in tolerably good condition, but others again are said to be very bad, and to require bridging.

Repairs to buildings.

296. The expenditure under the head of repairs to buildings, &c., for the accommodation of the military, has been 8,216 rupees, and consists of sinking wells, annual white-washing of barracks, and other trifling works too numerous to mention.

Repairs to civil buildings.

297. The repairs to civil buildings call for no particular remark.

Prices of labour and material.

298. The prices of labour and material are the same as in 1860–61; but some difficulty is experienced in obtaining a sufficient supply of the former in the Hospet taluq. As respects timber, the department has a large quantity on hand, and there is not likely to be a want of that material for some time to come.

Expenditure from local funds.

299. The district roads have been kept in order, and improved by the local funds, of which 13,254 rupees have been expended on four different lines.

KURNOOL.

Expenditure.

300. The expenditure in this district during the year 1860–61 amounts to 85,438 rupees. The prevalence of sickness and consequent changes and removals among the officers and subordinates, and the great drain on the labour market, caused by the operations of the Irrigation and Canal Company, prevented any greater outlay.

Summary of expenditure.

301. The sum above-mentioned was distributed in the following manner:—

— — — —	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	- - -	17,221
Communications - - - - -	26,957	26,723
Buildings - - - - - -	12,960	1,577
TOTAL - - - *Rs.*	39,917	45,521

Expenditure on the Nundy Canama ghât.

302. The greatest expenditure has taken place on the Nundy Canama ghât, on which 8,170 rupees were laid out in completing the western face. The whole of the new trace has now been made passable for carts with the exception of about half a mile above the principal viaduct, and this portion is expected to be completed within the next working season, if efficient superintendence be made available. The traffic at present averages 2,737 carts and 4,700 cattle monthly.

Kunderu bridge.

303. The next greatest outlay has been in the Kunderu bridge. This work which was suspended in 1857, is now progressing very satisfactorily. The expenditure thereon during the past year amounts to 7,014 rupees.

Progress made at the Dorenal pass.

304. At the Manteral Kanama ghât or Dorenal pass the whole distance from Bairluty to Mantrallama has been made passable for bandies. Until lately the ghât has only been used by Lambadi traders, who take grain and salt from the Guntoor district on the backs of cattle, but in future it will be available for cart traffic from Kurnool towards the coast. At the close of the season, carts employed in bringing up supplies crossed the ghât from Venkatapuram, on the western side, to Dorenal at the eastern foot of the pass.

Expenditure on Dorenal.

305. The expenditure on this work during the year was 5,930 rupees. The extreme unhealthiness of the locality prevents any great number of labourers from being collected and so necessarily limits the amount of progress, and as long as the Irrigation Company's operation affords employment on the plains there will be difficulty in obtaining labour for this ghât.

Road from Dorenal to Dapadu.

306. The next work which may be noticed, is the new road from Dorenal to Dapadu, intended to facilitate the approach to the Manteral Kanama pass from the Guntoor district. On this 4,549 rupees have been expended during the year in opening out, levelling, and draining 17 miles in length.

Principal buildings in progress.

307. Of buildings, the chief work in progress has been the new church at Kurnool, on which the outlay amounts to 2,190 rupees. The work was commenced in November 1861, and will probably be completed in the course of six or eight months.

School room at Kurnool.

308. A new school room has also been built at Kurnool by means of private subscriptions. The expenditure on it during the year was 436 rupees.

Repairs to irrigation works.

309. On repairs to irrigation works, the expenditure was 16,915 rupees. The largest amount was at the channels of the Cumbum tank and at the Nandial and Paniem Row tanks.

Repairs to the Owk tank.

310. The repairs to the supply channel of the Owk tank, mentioned in the last Administration Report, have been completed, and the revenue greatly benefited thereby. In all 83 tanks and 90 channels were repaired during the year.

Repairs to roads.

311. On repairs to roads, 26,723 rupees have been expended in keeping 256 miles of district roads and 7 miles of branch roads in repair, the whole of which are reported to be generally in fair order.

Difficulty of obtaining labour.

312. The great project of the Irrigation and Canal Company for a canal through the centre of the district has attracted to itself all the available labour within 60 to 70 miles of Kurnool, and has, besides affecting the operations of the department in other ways, caused the prices of labour and carriage to rise greatly, and will probably continue to do so for some time.

MADRAS.

Amount of expenditure.

313. During the year 1860-61 the expenditure on public works in this district has been 2,72,119 rupees, viz.:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	24,629	37,503
Communications - - - - -	7,399	1,25,922
Buildings - - - - - -	57,156	19,510
Total - - - *Rs.*	89,184	1,82,935

Channels connected with the Palar anicut project.

314. Under the head of irrigation the largest outlay has been 19,802 rupees on the channels connected with the Palar anicut project. Very fair progress has latterly been made with these works, and every effort is being used to hasten on their completion.

Coast canal from Sadras to the Palar river.

315. The next work of importance in progress was the extension of the coast canal from Sadras to the Palar river. The allotment for the year was 17,000 rupees, but owing to the difficulty experienced in obtaining possession of the land through which the cuttings are to be taken, the progress has not been very great, the expenditure not being more than 6,674 rupees.

Trunk road, No. 6.

316. Of communications, the chief work during the year has been the re-metalling of trunk road No. 6, on which 18,237 rupees have been laid out from an estimate of 32,200 rupees.

Artillery depôt at St. Thomas' Mount.

317. Under the head of buildings a sum of 23,626 rupees has been expended in completing the eastern range of the artillery depôt at St. Thomas' Mount.

Army school at St. Thomas' Mount.

318. The army school at the same station, which was commenced in April 1859, has been finished at a total expense of 21,108 rupees, of which 7,576 rupees were spent during the year under review.

Stables at Guindy Park.

319. The stables at Guindy Park have also been improved at a cost of 3,335 rupees.

Repairs to the Chingleput gaol.

320. The extensive repairs and alterations sanctioned to an extent of 11,600 rupees to the Chingleput gaol have been commenced, but as yet only 1,602 rupees have been expended thereon.

Salt platforms, &c.

321. *Rs.* 8,104 have been laid out in constructing salt platforms at the depôt near the collector's cutcherry in Homes' Gardens, and in completing the following buildings in connexion therewith:—

	Rs.
Salt Cutcherry at Homes' Gardens - - -	2,367
Constructing Record-room at ditto - - -	460

PULICAT.

	Rs.
At Pulicat quarters for the Superintendent of the light house have been erected at a cost of - -	2,947

Condition of irrigation works.

322. The irrigation works of the district are reported to be not in such good condition as could be wished. During the past year 37,513 rupees have been laid out in repairs to 175 tanks and channels.

Repairs to communications.

323. Under the head of communications, 1,06,206 rupees have been spent on repairs to 225 miles of road, and 98 miles of coast canal have been maintained at a cost of 19,716 rupees.

324. The

Repairs to buildings.

324. The outlay on repairs to buildings was distributed in the following manner:—

	Rs.
Military buildings - - - - - -	12,456
Civil ditto - - - - - -	6,605

None of these call for special remark.

NORTH ARCOT.

Expenditure.

325. The outlay in this district during the past year has amounted to 1,95,442 rupees, under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	Rs.
Irrigation - - - - - -	50,532	40,630
Communications - - - - -	50,189	45,018
Buildings - - - - - -	2,091	6,982
Total - - - Rs.	1,02,812	92,630

Principal new works in progress.

326. The projects connected with the Palar and Poinay anicuts have been the principal new works in progress.

Progress made with the Palar project.

327. At the former, the outlay on the left or north bank of the river was 36,178 rupees, with which sum the Mahindravady channel, and the calingulahs at the north and south ends of the tank of the same name, have been nearly completed.

Progress made with the Palar project.

328. On the south bank 16 small channels have been cut from tank to tank in connexion with the Doosy Mamundoor main channel on an expenditure of 14,250 rupees.

Progress made with the Palar project.

329. The tanks connected with this project have received considerable attention, more particularly the Caverypauk tank, the rough stone revetment of which is under thorough repair. In order to take as much advantage as possible of the early freshes, a small embankment has been formed on the top of the anicut, the entire length across the river. The completion of the bridge over the anicut will shortly be commenced, materials for the purpose having been collected.

Progress made with the Poinay project.

330. On the Poinay project, the western channel has been partly opened as far as Verantangle, four miles from the anicut; two surplus calingulahs have also been built, at a total cost of 1,001 rupees. The eastern channel has also been improved.

Poinay anicut.

331. The anicut itself is in very good order, and a small bank has been raised over it, similar to that on the Palar anicut.

Communications; new ranks.

332. Of communications, the following new works may be noticed:—

	Rs.
1. Road from Arnee to Conjevaram - - - - - -	9,998
2. Road from Tiruttany to Arcot cuppum - - - - -	4,315
3. Road from Ramakistnapuram to Tiruttany - - - -	5,688
4. Road from the Puttur station to Nagalapuram - - - -	4,000
5. Road from Vellore to Arnee - - - - - - -	7,004

Progress made with new works.

333. The first three works were completed in April last, and will be of great benefit to the district.

Road from Puttur station to Nagalapuram.

334. On the road from the Puttur station to Nagalapuram, upwards of eight miles of earthwork have been finished, and all the masonry works on the road from Vellore to Arnee are nearly completed.

Road from Tirupatty to Kalastry.

335. On the road from Tirupatty to Kalastry, 14,658 rupees have been laid out in improvements, and the road from Nagary to Balapully has been repaired as far as Mamundur at a cost of 2,396 rupees.

Approaches of the Palar Bridge.

336. The approaches of the Palar Bridge at Vellore have also been widened and completed. The expenditure thereon during the year was 2,130 rupees.

Principal new works in progress under the head of buildings.

337. Of buildings the principal work undertaken was the repairs and improvements to the roof of the lower barracks at Raneepett. This work was completed in January last at a total cost of 7,943 rupees, of which 2,976 rupees were expended during the year.

338. The

Principal new works in progress, &c.

338. The other new works in progress under the head of buildings were the police ameen's kacheri at Vencatagherry Cottah, the cutwall's choultiry at Wallajapett, and a few military buildings, &c., at Raneepett, which do not require special notice.

Repairs to irrigation works and roads.

339. Under the head of repairs to irrigation works, 40,630 rupees were expended on 160 tanks and channels; for the outlay, 45,018 rupees, on roads, the following lines received the principal attention:—

	Rs.
1. Trunk Road No. 1 - - - - - - - -	7,759
2. Trunk Road No. 10, from Raneepett to the Mysore frontier beyond Palmanair - - - - - - - -	12,746
3. Trunk Road No. 11, from Chittoor to Kullur - - -	6,403
4. Trunk Road No. 7, from Poothulput to Kircumbady - -	3,850

Condition of district roads.

340. The whole of these roads are represented to be in fair order, though in some instances the maintenance allowance has been considerably reduced. On road No. 10, the traffic has continued to be very considerable.

Prices of material and labour.

341. There has been little or no change in the prices of material and labour during the past year.

Expenditure from local funds.

342. The expenditure from the local funds amounts to 35,256 rupees, for which sum 165 miles of new district roads have been made, and 365 miles of the same description of road repaired.

SOUTH ARCOT.

Summary of expenditure.

343. The expenditure in this district has been 1,83,989 rupees, of which the following is a summary:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	37,239	56,697
Communications - - - - -	30,586	56,305
Buildings - - - - - -	559	2,603
TOTAL - - - *Rs.*	68,384	1,15,650

Progress made with the Ponniar anicut.

344. No new irrigation work of importance has been commenced during the year, but the Ponniar anicut, commenced in the previous year, is now almost completed, the coping of the body of the anicut alone remaining to be built. The expenditure for the year has been 27,902 rupees.

Works under the head of communications.
Road from Porto Novo to Shatia Tope.
Bridge of four arches on the road from Oolundoorpett to the Western frontier.

345. Under the head of communications, the works most deserving of notice are the following:—First, the road from Porto Novo to Shatia Tope on trunk road No. 9, on which 13,083 rupees have been expended in gravelling 2½ miles, and in raising and covering the remainder with sand. Second, a bridge of four arches, of 36 feet span, on the road from Ooolundoorpett to the western frontier. This work, which was commenced previous to the restrictive orders, has been completed at a cost of 4,500 rupees, and will be of great convenience to the traffic passing over the road. Third, two bridges of 24 feet span each, one of 10 feet span, and seven tunnels. These have also been completed, and a considerable quantity of material has been collected for work to be done in the present year, at a cost of *Rs.* 7,414. 7.

Principal roads have been improved.

346. The principal roads in the district have been put in as good order as the allowance sanctioned for their maintenance will admit. The traffic on some of these lines is very heavy, and an increased maintenance allowance is reported to be necessary.

Repairs to irrigation works.

347. The expenditure under the head of repairs to irrigation works amounted to 56,697 rupees, inclusive of the cost of "minor new works;" for this sum many works of utility have been executed, of which the following are the principal:—

	Rs.
1. Repairs to the Vellaur anicut, apron and channel - - -	1,235
2. Repairs to the Mana Voikal bank - - - - - -	1,499
3. Two vaganies in the Coleroon river - - - - - -	1,817
4. Repairs to the Davangudi Channel - - - - - -	1,851
5. Repairs to the Veranum tank bank - - - - - -	1,999
6. Clearing the main supplying channel of the Manambatham tank -	2,878

348. A small

Anicut across the Mullataur.

348. A small anicut has also been built across the Mullataur at a cost of 550 rupees, which it is expected will nearly pay for itself by the increase of revenue in the present year.

Repairs to salt platforms.

349. On repairs to salt platforms, 1,278 rupees have been expended.

Performance of work on contract.

350. The work in the district has, wherever practicable, been carried out on the same system as during the year 1860–61. Contracts were enterêd into, but no advances were given except in a few instances, and those were for very trifling amounts. Very little assistance has been given by the ryots in repairing the works in which they are interested.

Repairs to buildings.

351. The repairs to buildings were of the ordinary description, and call for no remark.

Expenditure from local funds.

352. The expenditure from the local funds amounted to 54,582 rupees, for which sum 200½ miles of road have been repaired, 34 miles covered with sand, and 24½ miles gravelled. Ninety-nine small bridges and tunnels have also been built, and the traffic has been much facilitated by these improvements.

Rates prevailing in the district.

353. The rates prevailing in the district are much the same as those of the preceding year, with the exception that at Cuddalore, and in the vicinity of the larger coast towns, the rates for building materials have still a tendency to rise.

Season.

354. The season has not been very favourable. On the whole, the south-western taluqs have received perhaps the best supply of water.

TANJORE.

Expenditure.

355. In this district, as respects new works, there is but little to record, the works of importance carried out during the past year being few in number. The expenditure, exclusive of advances, amounts to 1,95,968 rupees, viz:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	4,562	1,14,286
Communications - - - - -	13,442	45,647
Buildings - - - - - -	2,096	15,935
TOTAL - - - *Rs.*	20,100	1,75,868

Revetment to the Yengen Coroomboo.

356. The principal new irrigation work in progress, was the revetment to the Yengen Coroomboo below the Valayar head sluice, the expenditure on which has been 1,909 rupees, and the work is nearly completed.

Tulnoyer Cotagum project.

357. *Rs.* 1,534, have also been spent during the year in completing the project sanctioned in 1855 for improving the irrigation and drainage connected with the Tulnoyer Cotagum, a work which had been in progress since April 1855, and has cost in the aggregate 35,003 rupees.

Outlay on communications.

358. Of the outlay on communications, the greater portion was on account of the following works:—

	Rs.
1. Reconstructing bridge across the new Munnyar, on Road No. 2 -	2,536
2. Reconstructing bridge over the Codamurutti, on Road No. 36 -	3,816
3. Reconstructing bridge across the Nasoommiaur, on Road No. 15,	1,922
4. Reconstructing bridge across the Nasoommiaur, on Road No. 8, from Tanjore to Puttucottah - - - - - - -	1,104
5. Reconstructing bridge across the Nasoommiaur, on ditto - -	2,815
6. Reconstructing bridge across the Nasoommiaur, on Road No. 19, from Manargudy to Arunthangy - - - - - -	988

Progress made with improvements to communications.

359. The first two works, commenced in the previous year, were completed a little before the setting in of the north-east monsoon. At Nos. 3 and 6 works, the arches are in a forward state, and at the other two, Nos. 4 and 5, the superstructure has been built up to the springing line of the arches.

Sea Custom House at Negapatam.

360. The only building that need be mentioned is the Custom House at Negapatam. The expenditure to the 30th April 1862 was *Rs.* 9,902 7. 10. on an estimate of 13,319

rupees. The whole of the brickwork except that of the verandah had been finished, and the flooring and roofing only remained to be done.

Repairs to irrigation works.

361. The expenditure on repairs to irrigation works during the past year amounted to 1,14,286 rupees, or 25,815 rupees less than that of the preceding year. There were no very heavy freshes in the rivers, and as the embankments were greatly strengthened in 1859 and 1860 they have not since sustained much damage. Groynes and nanal plantation have lately been substituted for modussils for their protection, and it is hoped that the annual cost of their repair will in future be much reduced.

Injury effected to the lower Coleroon anicut.

362. Although the embankments have not been injured, the southern branch of the lower Coleroon anicut has been seriously damaged. In December last several portions were undermined, and five were so much injured that it was necessary to remove them. Since January the repairs to the work have been actively carried on, and it is expected that the anicut will be restored to its former condition before the early freshes come down the Coleroon, but it is doubtful whether all the arches will have been re-built within that time.

Increase in price of materials, &c.

363. Owing partly to the high price of grain, which enables the Merassidars to give constant employment to their coolies, and partly to the great demand for labour at the railway, there has been a difficulty in obtaining a sufficient number of men for the Government works. Prices also have risen, and in one taluk the cost of earth and masonry work has increased from 10 to 12½ per cent. on the rates of the preceding year.

TRICHINOPOLY.

Expenditure.

364. The total expenditure during the year amounts to 2,14,358 rupees, viz.:

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	27,142	62,853
Communications - - - - -	76,876	34,684
Buildings - - - - - -	6,374	6,429
TOTAL - - - *Rs.*	1,10,392	1,03,966

New works of irrigation.

365. The principal new works of irrigation have been—

	Rs.
1. The Peravally Channel improvements - - - - - -	10,398
2. The re-construction of the Nat Voikal head sluice - - -	2,411
3. Ponnairy project works - - - - - - - - -	9,329
4. Sluices in the Rutnagudi Anicut - - - - - - -	4,987

Progress made with irrigation.

366. At the first work good progress has been made; the second has been completed, with the exception of a small portion of the rear revetment, and the fourth work has been finished.

Ponnairy project.

367. On the Ponnairy project the under tunnel was completed, and the main and branch channels so far advanced that water was admitted into them, but immediately afterwards a very high flood caused by local rains seriously injured the tunnel, breached the embankments, and silted up a portion of the channel. The repairs of the tunnel are now in progress, and efforts are being made for the early completion of the work.

Road from Trichinopoly to Salem.

368. Under the head of communications, the chief expenditure has been on the road from Trichinopoly to Salem, 40 miles in length, which has been improved and gravelled at a cost of 23,945 rupees.

Trunk road, No. 8, from Trichinopoly to Madras.

369. The first seven miles of Trunk Road No. 8 from Trichinopoly to Madras have also been metalled, and a large quantity of material collected for the remaining portion of the road. The expenditure during the year has been 10,190 rupees.

Coimbatore line.

370. On the Coimbatore line 11,652 rupees were laid out in gravelling 18 miles of road, and the whole of the improvements, on which there has been an aggregate expenditure of 48,869 rupees since their commencement in March 1859, are fast approaching to completion.

Road from Trichinopoly to Dindigul.

371. Rapid progress has also been made with the repairs to the road from Trichinopoly to Dindigul on which the expenditure during the year amounts to 7,234 rupees.

Bridges in progress.

372. Besides the above improvements, the re-construction of three bridges has been in progress, viz. :—

	Rs.
The Codamurutty Bridge (arches all turned and uncentred) - -	9,278
The Iyar Bridge (four arches turned) - - - - - - -	7,426
The Koolyar Bridge (completed) - - - - - - - -	5,352

Buildings in progress.

373. Under the head of the buildings, the district engineer's office and store-yard was the principal work in progress. The main buildings have been completed, and the artificer's sheds only remain to be built. The expenditure in the year was 3,545 rupees.

Buildings in progress.

374. The following works have also been completed:—

	Rs.
1. Wall to the compound of the Travellers' Bungalow at Trichinopoly,	599
2. Wash-house for the Artillery Barracks - - - - - -	922
3. Improvements to the drainage of the Infantry Barracks - -	1,386

Repairs to irrigation works.

375. The expediture on repairs to irrigation works was distributed in the following manner:—

	Rs.
Channels - - - - - - - - - - - -	28,006
Tanks - - - - - - - - - - -	12,874
Embankments - - - - - - - - - -	21,973
Total - - - *Rs.*	62,853

with this sum the channels and tanks have been kept in good order, and the river embankments well strengthened and improved.

Repairs to buildings.

376. The repairs to buildings call for no special remark.

Condition of main lines of communication.

377. The main lines of communications have been kept in fair order at a cost of 34,684 rupees. The work extended over 253 miles of road, or 53 miles in excess of the preceding year.

Rates of labour and prices of material.

378. The rates of labour and prices of material have been about the same as in 1860-61, and all the earth-work repairs, as well as the digging and carting of gravel for roads, were readily taken up on contract, and executed without advances by the several villagers interested in the work. The only rise has been in the rate of bandy hire, which has increased upwards of 30 per cent. on the prices formerly given.

Sickness among the subordinates.

379. During the year there were several cases of cholera among the members of the department, and one of their number, Mr. Supervisor Dick, died. Notwithstanding the reduced strength of the Department caused by Mr. Dick's death, and the temporary absence of Lieutenant Mead on duty in Madura, the expenditure has been 41,400 rupees in excess of the year 1860-61, and many works of importance have been executed.

Expenditure from local funds.

380. The expenditure from the local funds amounted to 2,584 rupees, chiefly in removing walls round the Nabob's palace, and repairing roads in the Fort at Trichinopoly.

MADURA.

Expenditure.

381. The outlay in this district during the past year has been 1,44,484 rupees, under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - - - -	3,602	32,501
Communications - - - - - -	76,640	12,960
Canals - - - - - - - -	10,262	1,924
Buildings - - - - - - -	3,202	3,393
Total - - - *Rs.*	93,706	50,778

Formation of road No. 4, from Trichinopoly to Madura.

382. Of new works, it will be observed that the chief outlay has been on communications and canals. Under the first head the principal work undertaken was the formation of road No. 4, the high military and commercial road leading from Trichinopoly to Madura, and thence to Tinnevelly and Travancore. The expenditure on this line has been 31,542 rupees,

and of the length of road estimated for, viz., 60 miles; 48 miles, including 17 bridges and tunnels, have been completed, and 13 other masonry works nearly finished.

Bridge over the Ambravutty river.

383. The next work that may be noticed is the bridge of nine arches of 40 feet span over the Ambravutty river on the road from Dindigul to Paulghat and the western coast. The expenditure thereon during the year has been 8,891 rupees. From various causes the construction of this work was long delayed, but latterly its progress has been expedited, and its early completion may be expected.

Outlay on Road No. 25.

384. On road No. 25, 5,264 rupees have been spent in completing the portion between Tiroomangalum and Oosalamputty, and this line only wants metalling for three-quarters of a mile to complete it.

Outlay on Road No. 15.

385. Upon road No. 15, between Dindigul and Madura, 3,614 rupees have been laid out in improvements, and 1,904 rupees in completing what remained to be done to road No. 1, between Dindigul and Trichinopoly, on an estimate of 6,800 rupees.

Other roads in progress.

386. Of the other roads in progress, and which are still under execution, the following are the most important:—

	Amount Expended in 1861-62.
	Rs.
1. Road from Madura to Paulghat - - - -	2,745
2. Ditto from Tondi *viâ* Davacottah and Tripattoor to Dindigul - - - - - - - -	2,179
3. Ditto No. 16 from Camoothi to Soylegoody - -	2,065
4. Ditto between Cariaputty and Arooppoocottah -	2,004
5. Ditto from Palkanooth to Aummanaickenoor - -	4,469
6. Ditto between Chuttraputty and Pulkanoth - -	2,716
7. Ditto between Madura and Paraputty - - -	2,383

Improvements to salt roads.

387. Eight salt roads have been also improved at a cost of 987 rupees, and the other roads in the district are being rapidly brought into order.

Principal buildings in progress.

388. The new works carried out under the head of buildings hardly call for notice, but the following may be mentioned:—

	Rs.
Constructing moonsiff's court house at Dindigul - - -	364
Store-room at Paumben - - - - - - -	956
Travellers' bungalow at ditto - - - - - - -	1,270

The two first works have been completed, and the second nearly so.

Repairs to irrigation works.

389. The expenditure on repairs to the several irrigation works in the district was distributed in the following manner:—

	Rs.	*a.*	*p.*
116 Tanks - - - - - - -	19,868	4	9
20 Channels - - - - - - -	2,445	10	7
19 Sluices - - - - - - -	574	3	1
37 Calingulahs and weirs - - - -	9,613	1	5

Work performed at Paumben.

390. At Paumben the out-turn of work done by the steam dredge has not been so great as was desired, owing to the continued illness of the mechanical engineer, and to the dredge itself having been under repair for upwards of six months.

Usefulness of the hand dredge at Paumben.

391. The hand dredge was, however, very useful at the Sand bank channel for some time, and afterwards it was removed to the Reef channel where it did good service until April last, when the wind and current became too strong for it to work there any longer.

Work executed at the Sand bank channel.

392. At the Sand bank channel the expenditure has been 933 rupees, and its depth throughout is at present 11 feet at low water neap tides.

Work executed on the Reef channel.

393. The expenditure in removing the inner angle of the Reef channe was 2,483 rupees, for which sum 48,580 cubic feet of stone and *débris* were removed therefrom.

Reef channel.

394. The Reef channel has been kept at a uniform depth of 12 feet at low water neap tides.

Number of vessels passing through the Paumben channel.

395. During the year, 2,123 vessels passed through the channel, and 555 others were warped through it. One of the former, the "Sir James Melville," was 213 feet long, with 64 feet beam.

Cost of repairs to steam dredge.

396. The cost of the repairs to the steam dredge has amounted to 2,963 rupees, and a further sum of 3,883 rupees was spent in constructing the mud lighters sanctioned for the channel; of the four sanctioned, two have been completed, and a third is under progress.

Great use of the new lantern exhibited in the Light House.

397. The new lantern on the catadioptric principle of Monsieur Tresnell, exhibited in the lighthouse at Paumben, is a most excellent one, and is duly appreciated.

Failure of carrying out works on contract.

398. The system of excavating works on contract has not worked well in this district; in several cases much inconvenience and delay has been occasioned by the failure of the contractors, and as a rule it has been found much better to carry out works by means of the subordinates of the department.

Insufficient supply of rain.

399. The district has suffered severely during the past year from want of rain and an insufficient supply of water in the principal river, the Vigay.

TINNEVELLY.

Difficulty of obtaining sufficient labour has prevented greater outlay.

400. No works of any magnitude have been executed in this district during the past year, and owing to the difficulty met with in procuring sufficient labour, the expenditure has fallen short of the amount sanctioned in the Budget, though it is nearly double the sum spent in 1860-61.

Actual outlay.

401. The actual outlay was as follows:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - - -	5,473	49,373
Communications - - - - -	44,776	43,190
Buildings - - - - - -	4,020	2,604
Total - - - *Rs.*	54,269	95,167

Anicut across the Vurruttaur.

402. Of the amount laid out upon new irrigation works, 3,759 rupees have been expended in completing a new anicut across the Vurruttaur, which is now in full working operation, and has been reported upon in satisfactory terms.

Minor works of irrigation.

403. The balance has been expended in the construction of several petty calingulahs and sluices for the improvement of different tanks, &c.

Work performed on Trunk Road No. 4.

404. Under the head of "New Roads," 15,842 rupees have been expended in forming portions of the main trunk road No. 4, leading from Madras to the Travancore frontier.

Work performed on Cotton Road leading into Tuticorin.

405. Rupees 15,259 have also been laid out on the Cotton road to Tuticorin. In accordance with the desire of Government, the chief portion of this work was given to a contractor to execute, but in consequence of the interruption caused by the operations of the pearl fishery, its progress has been much retarded. The fishery has, however, now ceased, and there is every hope that a large quantity of work will be completed by the end of June.

Salt Pan Roads.

406. The Salt Pan roads under construction in this district have progressed but slowly. The sum expended upon them during the year amounts to 9,669 rupees.

New buildings.

407. The new buildings executed have been chiefly small works connected with the Salt Pans.

Repairs to irrigation works.

408. The expenditure on repairs to irrigation works has preserved in a state of efficiency numerous tanks and channels, with their subsidiary works, and the more important channels have been carefully looked to, their beds cleared of deposit, and banks strengthened and raised where most needed. During the year under notice a great many cases of wilful injury to irrigation works have been brought to notice, but the punishments awarded are so trivial, that they do not deter others from committing similar offences.

Outlay on repairs to roads.

409. The expenditure on repairs to roads has had the effect of placing in good order many previously impracticable portions. On trunk roads Nos. 4 and 5, 20,975 rupees have been spent in improvements, and the balance of the outlay under the head of Communications was expended in judicious repairs to several of the most important lines in the district.

Repairs to Protestant Church at Tuticorin.

410. The chief item in building repairs has been 950 rupees in putting the roof of the old Protestant church at Tuticorin into good order.

411. The

Works executed from local funds.

411. The principal works executed from local funds have been a bandy pettah and line of bazars in the town of Tinnevelly, and repairs to the road connecting that town with Palamcottah. On the former work the expenditure has been 3,750 rupees, and at the latter 752 rupees.

Prices of labour and material.

412. The necessaries of life in this district are considerably dearer than they were a few years back, and the price of labour has been much affected by the change. Woodwork, owing to the restrictions now in force upon cutting timber, is nearly 100 per cent. dearer than it was seven years ago; and building materials of all kinds have risen so considerably in price, as to necessitate a corresponding increase being made in existing rates for labour and materials, in those cases where large improvements have to be carried out.

COIMBATORE.

Expenditure.

413. The expenditure in this district has been as follows:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	1,288	36,461
Communications - - - - -	17,470	72,044
Buildings - - - . - -	28,169	2,486
Total - - - *Rs.*	46,927	1,10,991

Arrakankottah and Thadapillay channels.

414. The only new works of "Irrigation" in progress were the Arrakankottah and Thadapillay channels on which an expenditure of not more than 1,288 rupees has taken place, owing to a suspension of work pending the submission of revised estimates.

Principal new works of communication.

415. The principal new works of "Communications" were the following:—

	Rs.
First class road from the railway station to connect Trunk Road No. 5 and the town of Coimbatore - - - -	3,983
First class road from the railway station at Shoranoor to Trunk Road No. 5 near Karoomathamputty - - - - -	2,203
First class road from Perudarry to the railway station - -	2,869

Railway feeders.

416. These lines, intended to serve as railway feeders, have been completed, and are now open for traffic.

Jail at Ootacamund.

417. Of new buildings, the principal in progress was the gaol at Ootacamund, the expenditure on which has been 27,138 rupees. The work was completed during the past year under the immediate superintendence of the Inspector General of Gaols, at a total cost of *Rs.* 73,448. 12. 8., and 29 prisoners sent from Calcutta have since arrived, and been lodged in the building.

Irrigation works.

418. The irrigation works of the district have been kept in order for a sum of 36,461 rupees, the usual current repairs having been the special object of attention with the department.

Repairs to communications.

419. As respects communications, the ordinary maintenance allowance has been in one or two cases increased, and the usual repairs to all the roads have been executed at an aggregate cost of 67,189 rupees. It is found, however, that owing to the increased wear and tear attendant upon the wheel traffic from and to the railway, the traffic on one road being five times as great as formerly, the repairs hitherto sufficient to maintain the communications in good order will not be sufficient for the future, and the subject of increasing the annual maintenance allowance is now under consideration.

Travellers' Bungalows at Neddivattam and Sisparah.

420. In addition to the ordinary repairs to buildings, the Travellers' bungalows at Neddivattam and Sispaiah have received special attention, and an expenditure made on them of 1,700 rupees and 930 rupees respectively.

Want of rain has affected the prices of labour and materials.

421. Want of rain and consequent failure of crops have enhanced the price of labour and materials in every part of the district, except in the Collegal range, where they remain the same as in 1860-61.

Prevalence of Cholera.

422. Cholera has also been very prevalent, and towards the close of the past official year, Government, in consequence of the wretched condition of the poorer classes, granted a special sum of 30,000 rupees for expenditure upon public works, under the joint direction of the collector and district engineer; of this sum, the collector has expended *Rs.* 10,874. 15. 1.

Expenditure from local funds.

423. In regard to local funds, the whole amount available, viz., 32,905 rupees, has been expended chiefly on district roads and chuttrums.

Expenditure inclusive of local funds.

424. The expenditure, inclusive of local funds, amounted to 1,90,823 rupees, and the whole district has, during the past year, received a proper share of attention.

SALEM.

Expenditure.

425. In this district the expenditure upon public works has been 1,58,850 rupees, as follows:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - - -	2,159	28,431
Communications - - - - - -	18,033	77,650
Buildings - - - - - - -	30,771	1,806
Total - - - *Rs.*	50,963	1,07,887

Principal works carried out under the head of Communications.

426. There were no large new works of irrigation in progress during the year. Of those carried out under the head of Communications, the following may be noted:—

	Rs.
1. Constructing a metalled road from Rajipur to Senkajiridroog	2,232
2. Making a cart track between Suramungalum railway station, and the town of Nangavally - - - - - -	2,031
3. Improving the road from Dharampuri to Morapur - -	4,885
4. Constructing road from Adamankotta to the railway station at Mallapuram - - - - - - - - -	2,743
5. Constructing road between the town of Dharampuri and the railway station at Morapur - - - - - -	2,287

Progress made with ditto.

427. These roads have, with the exception of No. 2, which is yet under progress, been completed during the year, and the four last will be very important feeders to the South-West Railway, to which they are likely to bring considerable traffic from the interior of the district.

New buildings in progress.

428. The principal buildings in hand were the following, all of which have been completed:—

	Rs.
1. Gaol at Salem - - - - - - - - - -	5,249
2. Court Houses at Salem - - - - - -	15,919
3. District Engineer's office, &c. at Salem - - - -	1,917
4. Moonsiff's Court House at Senkajiridroog - - - -	1,445
5. Stables at Oossoor - - - - - - - -	1,405

Total cost of ditto.

429. The total cost of the first two works amounts to 35,770 rupees and 85,830 rupees respectively, while that of the third is 5,500 rupees.

Salem and Trichinopoly road.

430. On the Salem and Trichinopoly road, two bridges have been commenced between Namad and Valyapatty, and on trunk road No. 1 another bridge has been built near Oossoor at a cost of 3,611 rupees.

Irrigation works carried out.

431. Of irrigation works, 93 tanks, 16 channels and 29 weirs have been repaired at a cost of 28,431 rupees, and the general condition of all those yielding a revenue of 500 rupees and upwards is reported to be satisfactory.

Outlay on repairs to roads.

432. On roads, 77,650 rupees have been laid out in keeping 650 miles in repair.

Repairs to buildings.

433. The repairs executed to buildings were of the ordinary description.

Expenditure from local funds.

434. The expenditure from local funds was 31,532 rupees, viz., 7,394 rupees on the formation of about 19 miles of new road, and 24,138 rupees on repairs and improvements to 357 miles, of which 50 were made in the previous year.

Result of the general working of the department.

435. Nearly all work of importance was done by contract, and although rates of labour and prices of material continued very high, yet the general working of the department in this district is represented to have been satisfactory during the past year.

NORTH CANARA.

Transfer of District to the Bombay Government.

436. The principal event of the year has been the transfer of the district from the Madras to the Bombay Presidency, carried out as regards the Public Works Department on the 1st February 1862, up to which date the expenditure amounted to 1,34,540 rupees, viz. :—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Communications - - - - -	52,462	60,520
Ports and Harbours - - - -	15,105	—
Buildings - - - - - -	1,650	4,803
Total - - - *Rs.*	69,217	65,323

Unhealthiness of season.

437. With the exception of the Kyga ghât among new works, and the Dharwar and Coompta road among repairs, the expenditure has not been so great as was desired, owing chiefly to the want of adequate and efficient superintendence, but also to the scarcity of labour caused by the unhealthiness of the season, and the demand for coolies in the coffee estates of Mysore and Coorg.

Outlay on the Kyga Ghât.

438. The total outlay on the Kyga ghât has been 43,003 rupees on an estimate of 1,05,330 rupees, of which 28,007 rupees were spent during the past year by this department prior to the work being handed over to the Bombay Government. Commencing at Iddagoonjee, six miles from Yellapoor on the Arbyle road, 16 miles of approach to the head of the ghât have been opened to a width of 12 feet, and rendered passable for carts in the dry weather. Of the ghât itself seven and a half miles were similarly opened, except at a few places where rocky obstructions had to be removed. The trace of the remaining 25 miles from the foot of the ghât to Beitkul is of various widths, from that of a bridle-path to 18 feet, near the harbour.

Road from Hullial to the north bank of the Sedashegur river.

439. Another work of importance in progress was the road from Hullial to the north bank of the Sedashegur river by the Unshy ghât. On this line the expenditure during the year amounted to 21,743 rupees, for which the portion from Hullial to half-way down the ghat has been made practicable for carts in dry weather. One bridge at Kaysaroly has also been nearly completed, and fair progress made with two others at Birchy Nulla and Kaysaroly respectively.

Junction roads from Moondagode towards Bunkapoor.

440. The junction roads from Moondagode and Palla towards Bunkapoor have also been marked out, and operations commenced, and materials are being collected for bridges on the Gairsoppa ghât. The expenditure on these roads was 542 rupees, and on the bridges 2,070 rupees.

Expenditure on work at Beitkul.

441. At the proposed new port of Beitkul, near the village of that name, 15,006 rupees have been expended, chiefly on account of plant and machinery, beyond the obtaining of which little else had been done but to mark out the intended work.

General rise in the price of labour and materials.

442. Owing to the unsettled feeling which existed for some time regarding the transfer of the district to the Bombay Presidency, and to the unhealthiness of the season which, according to the district engineer's report, has been unprecedented for the last 16 years, there was a general rise in the rates of labour; enhanced rates were therefore allowed wherever it was an object to mass labour, as on the Kyga ghât and its approaches from the interior, and up to the date embraced by this report, the arrangements made for the purpose secured a fair supply of workpeople to the ghât.

Distribution of small coins.

443. The distribution of small coins over the district has been particularly attended to by the department, and every effort was made during the past two seasons to carry out effectively the intentions of Government on the subject.

SOUTH CANARA.

Full allotment of funds not expended.

444. Want of labour, caused by the prevalence of sickness, and the preference shown by coolies for employment on the coffee estates, has prevented the full allotment of funds from being expended in this district.

Summary of expenditure.

445. The total amount of outlay was 51,353 rupees, classified in the followed manner:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Communications - - - - -	9,512	28,898
Buildings - - - - - -	7,750	5,193
Total - - - *Rs.*	17,262	34,091

Sumpajee Ghât.

446. Under the head of Communications, *Rs.* 2,791. 10. 2. have been expended in metalling nearly two miles of the Sumpajee ghât.

Kautyar bridge on Trunk Road No. 2.

447. *Rs.* 3,678. 2. 5. have also been laid out on the construction of the Kautyar bridge on trunk road No. 2. This work is completed, and is a great improvement to the road.

Maury bridges on Trunk Road No. 3.

448. The Maury bridges on trunk road No. 3 have been completed at a total expense of 8,058 rupees, of which 834 rupees were spent last year.

Re-construction of two bridges on the same road.

449. Materials were also collected at a cost of 2,208 rupees for the re-construction of two bridges on the same trunk road. At one of these works a portion of the foundations of one of the piers has been laid, but at the other nothing can be done until after the monsoon.

Collector's cutcherry.

450. On buildings, the chief outlay has been on the collector's cutcherry at Mangalore, where it amounted to *Rs.* 4,086. 1. 10.

Other works.

451. The following works have also been in progress:—

	Rs.
Moonsiff's court at Karakal (roof remaining to be put on) - -	448
Sea Custom House at Angarkotta (completed) - - - -	548
Taluq cutcherry at Upinangudi (materials being collected) - -	466

Repairs to communications.

452. Under the head of "Repairs to Communications," trunk road No. 2, or Sumpajee-ghât road, leading from Mysore to Mangalore, has been efficiently maintained at an outlay of *Rs.* 6,369. 12. 4. on the portion in Canara, and *Rs.* 3,925. 2. 4. on that in the Coorg territories, and the whole line within these limits is reported to be in good order.

Hallaydy road circuit.

453. *Rs.* 9,776. 2. 1. have been expended from the Hallaydy road circuit estimate on improvements to the roads from Agumba to Mudbidry, Someshwar to Hallaydy, Someshwar to Mulpy, and on the reconstruction of a bridge at Billbyle. On all these lines the gradients have been lessened, the road widened, and bridges repaired.

Charmady road.

454. From the discretionary allowance, *Rs.* 5,425. 8. 8. have been spent chiefly on the Charmady road, where several new bridges have been nearly completed, and other improvements effected.

Other lines of communication.

455. Other lines of communication have been repaired and improved out of the discretionary allowance.

Repairs to buildings.

456. The repairs to buildings call for no further notice than that all have been maintained in good condition.

Increase in rates of labour and material.

457. The prices in this district are high and still increasing, owing to the large extent of coffee cultivation in Coorg and North Astagram in Mysore, and to the establishment of coffee works at Mangalore. Difficulty is also experienced in obtaining artificers, such as carpenters, sawyers, &c., and, with a view to remedying it, sepoys from the 8th Regiment Native Infantry have been lately employed on buildings in the town of Mangalore, though, owing to their being new to the work, the cost is not much reduced, notwithstanding that the rates of wages given to them are less than those asked for and paid to the ordinary workpeople.

Amount expended from local funds.

458. The amount expended from the local funds is *Rs.* 7,976. 14., viz., on communications (new works), *Rs.* 6,124. 13. 1., and on repairs *Rs.* 1,852. 0. 11.

Irrigation works.

459. There are no irrigation works in this district.

MALABAR.

Progress of works retarded by heavy rain.

460. The season of 1861–62 has been more healthy than that of 1860–61, and consequently more favourable during the hot months for the prosecution of works, but the lateness of the south-west monsoon and heavy rain in November last seriously retarded the progress of several bridges under construction.

Comparison of outlay with expenditure of three preceding years.

461. The outlay, amounting to 1,75,209 rupees, exclusive of 24,978 rupees from local funds, has, however, exceeded that of the preceding three years, and many important works have been carried out under the following heads:—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - - -	- - -	6,651
Communications - - - - -	1,11,038	21,729
Buildings - - - - - -	16,202	19,589
Total - - - *Rs.*	1,27,240	47,969

462. The

Largest outlay on roads and bridges.

462. The largest expenditure on new works, as is always the case in this district, has been on roads and bridges.

Wynad communications.

Roads from Manantoddy to Bahally, &c.

463. The chief works in progress were the Wynad communications, the outlay thereon amounting to 29,668 rupees. With this sum the road from Luckadi to Manantoddy, *viâ* Terriote, has been (with the exception of two miles) opened for bullock traffic 29 miles in length. The roads from Manantoddy to Bahally on the Mysore frontier, and from Manantoddy towards the Periah ghat, as far as eight miles, have also been repaired, bridged, and rendered practicable for carts, and the line to the Neilgherries from Manantoddy, *viâ* Gudaloor, has been repaired, as also the road from Manantoddy to Pannamanum and on to Kulputti and Luckadi.

Bridge across the Ponany river at Kulputti.

464. The next largest outlay has been incurred on the important bridge of seven arches of 50 feet span at Kalputti, across the Ponany river near Palghat, connecting that town with the railway station. All the arches had been turned, and five of them uncentered at an expenditure during the year of 19,842 rupees, and fair progress has been made towards the completion of the work.

Bullock trace from Karkur to Nadkany.

465. Another very important work in progress was the opening of a bullock trace from Karkur to Nadkany, at the head of the Karkur pass. The expenditure thereon was *Rs.* 15,442. 4. 8., and the trace has been carefully formed with an easy gradient of one in 19 for a distance of 14½ miles from Karkur to Ambala Vailoo, a village five miles from Nadkany. In a few places precipitous rock and large boulders are met with on the line, but with these exceptions a good trace eight feet wide has been made.

Other important lines in progress.

466. The following important lines have also been partly completed or improved :—

	Rs.
1. Road from Calicut to Palghat (opened as far as Manaar) -	14,994
2. Perambady Ghat and Road No. 4 (whole line of Ghat re-metalled and Road repaired throughout) - - - -	10,235
3. Tambrachari new Ghat (its completion expected at the end of 1862–63) - - - - - - - - - -	9,439

Roads from Calicut to Palghat.

467. The road from Calicut to Palghat is now practicable for carts the whole way, and traffic has in consequence commenced. The minor works along it will be completed this season.

Perambady Ghat.

468. The Perambady Ghat has been thoroughly re-metalled and the road from the top to the boundary, or 20 miles in length, has been gravelled. The Trunk Road itself has been repaired, where required, and the whole line is in excellent order and sustaining a great traffic.

Tambrachary Ghat.

469. The progress in the Tambrachary Ghat has been retarded owing to the quantity of rock met with. During the year a large bridge at its foot, consisting of five bays of 20 feet each, has been constructed for a sum of 1,200 rupees.

Outlay on Canals.

470. On canals, 3,015 rupees were laid out in deepening the line from Ponany to Chetwye, and from Cannanore to Cawoi.

Expenditure on repairs to roads.

471. As respects repairs, the expenditure incurred under the head of Irrigation, 6,651 rupees, was for the Yennamakal and Veatit dams, and the chief outlay under the head of Communications was on account of Trunk Roads Nos. 4 and 5, both of which are now in better order than heretofore.

Repairs to buildings.

472. The repairs to buildings, amounting to 10,692 rupees, have principally consisted of petty works costing less than 50 rupees, and are too numerous to particularize.

Prices of material and bour.

473. The price of every commodity of life has steadily increased in the district, and the prices of materials and labour for public works have been affected in the same way. The old rates prevailing in Malabar were low, and the construction of the railway in the immediate vicinity of some of the district engineers' most important operations, has tended to raise the rates and to render necessary in some cases the revision of estimates sanctioned for the execution of work.

Expenditure from local funds.

474. The expenditure from local funds amounted to 24,978 rupees; of this sum *Rs.* 4,232. 11. 8. were spent in constructing new, and in repairing old bridges; 17,591 rupees on roads, and the remainder on canals and extra establishments.

PRESIDENCY.

Expenditure.

475. The expenditure in this district during 1861–62 has been 3,21,130 rupees, viz. :—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Irrigation - - - - - -	332	874
Communications - - - - -	66,523	13,728
Buildings - - - - - -	1,77,262	62,411
Total - - - *Rs.*	2,44,117	77,013

Particulars of outlay under the head of Communications.

476. The outlay under the head of Communications has taken place chiefly on several long-desired works which have been carried out either by the municipal commissioners, or by the district engineer, and of which the following are the principal:—

	Rs.
1. Formation of new road east of the Madras Club House	43,000
2. Ditto along the east side of the canal north of the General Hospital	4,044
3. Improvements to the eastern portion of Royapooram	5,000

Drainage of Black Town.

477. Besides these works, a portion of the drainage of Black Town has also been improved at a cost of 10,580 rupees, all which, though only partial in effect, will conduce greatly to the comfort and convenience of the inhabitants of the localities in which the works are situated.

Repairs to the fortifications of Fort Saint George.

478. The principal buildings in progress were the alterations and repairs to the fortifications of Fort Saint George, and the construction of a new wing to the General Hospital. At the former, the expenditure during the year has been 43,467 rupees, and at the latter 31,216 rupees.

Other works in progress.

479. The following works may also be mentioned:—

First.—MILITARY.	*Rs.*
1. Improvements to the drainage of Fort Saint George	3,585
2. Rebuilding public latrines in ditto	4,742
3. Laying down a new line of water pipes from the Seven Wells to the Fort	2,742
4. Building for a Nasmyth's hammer at the Gun Carriage Manufactory	1,007
5. Buildings for the drying apparatus obtained for the Gunpowder Manufactory	10,190

Particulars of works in progress.

480. The first and fifth works are still under progress, the second is nearly finished, and the third and fourth have been completed at a total cost respectively of 38,622 rupees and 6,372 rupees.

Second.—CIVIL.	*Rs.*
1. Constructing a bandstand on the South Beach; completed July 1861	3,485
2. Upper story to the Central Office, Chepauk; completed in October 1861, at an aggregate cost of 15,442 rupees	2,026
3. Arrack distillery at Tondiarpett; completed in April 1862. Total cost, 22,200 rupees	2,698
4. Additional accommodation for the Paper Currency Department at the Mint, under execution by the Mint Master	7,700

Work performed at the People's Park.

481. Several works have also been carried out at the People's Park under the super vision of the honorary secretary to the committee, at an expense of 17,517 rupees, and 2,175 rupees have been laid out in the collection of materials for the construction of the approaches to the Madras Pier.

Repairs to buildings.

482. The repairs to buildings do not call for special remark.

Supply of materials.

483. The supply of materials generally has been equal to the requirements of the works in progress, but much difficulty has been experienced in obtaining well-seasoned teak timber.

Efforts made to introduce gravel bricks.

484. As respects bricks, it is hoped that by the introduction of liberal rates a better description will be furnished than formerly. Last year, an attempt was made by a private individual to manufacture a superior article by machinery, but within a short time after commencing operations he failed for want of funds, and the machinery has been taken over by a company, which, with a larger capital at its command, may probably be more successful.

Price of timber.

485. The price of timber has, notwithstanding its inferiority, increased nearly 50 per cent., and the cost of other materials has also risen, excepting that of chunam, which procured from the shell quarries on the Pulicat Lake, and manufactured under the immediate control of the district engineer, is supplied at 25 per cent. less than the market prices. The rates of labour remain the same as in 1860-61.

BANGALORE.

Expenditure.

486. The actual expenditure on Public Works executed at this station, exclusive of 25,096 rupees advanced for materials, amounts to 1,37,893 rupees, of which by far the greater amount has been on account of military buildings, as will be seen from the following statement:

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Communications - - - - -	349	5,320
Buildings - - - - - -	1,24,364	7,860
Total - - - *Rs.*	1,24,713	13,180

Principal Military buildings.

487. Of military buildings the following may be noticed :—

	Rs.
1. New dragoon barracks on the race course - - -	94,401
2. Married men's quarters at the old dragoon barracks - -	10,924
3. Ditto - - ditto - at the horse artillery lines - -	8,165

Progress made with buildings.

488. The first work is represented to be progressing favourably. Four ranges have been so far completed as to be ready for occupation. A fifth range is in an advanced state and requires little more than the flooring to be finished, and the remaining three ranges with their out-houses will, it is expected, be completed within another six months.

Progress made with buildings.

489. It is intended that the water from the roofs of these buildings shall be stored, and with this object in view 9,800 rupees have been sanctioned for the necessary works, of which 1,225 rupees have been expended during the year in the construction of a reservoir.

Married men's quarters.
Old Dragoon Barracks.

490. Of the married men's quarters at the old dragoon barracks, 24 have been completed, and altogether there are now 84 quarters ready for occupation.

Married men's quarters.
Horse Artillery Lines.

491. The married men's quarters at the Horse Artillery Lines, 16 in number, have also been finished.

Public buildings in the Cantonment.

492. All the public buildings in the cantonment have been kept in proper repair, and the roads maintained in an efficient condition.

Buildings at the Military Stations in the Mysore Territories.

493. The buildings at the military stations in the Mysore territories have as usual been attended to by the executive officer at Bangalore, and are reported to be all in good order.

Prices of material and labour.

494. Prices of material and labour have gradually risen. The cost of timber has in particular increased, and large scantling can only be obtained from the Madras market.

Value of work performed in the Engineer's work-yard.

495. Materials to the value of *Rs.* 54,282. 11. 5. were prepared and issued from the engineer's work-yard during the year 1861-62, and a sum of 711 rupees has been expended from local funds on improvements to the cantonment roads and nurseries.

WELLINGTON.

Following the practice of the last three years, the following separate report on the operations at Wellington is furnished, though, as explained in the Administration Report of 1860-61, the works have been placed under the general control of the district engineer.

Expenditure.

496. The expenditure during the year has been 43,590 rupees, viz. :—

	NEW WORKS.	REPAIRS.
	Rs.	*Rs.*
Communications - - - - - -	- -	6,084
Buildings - - - - - -	20,574	16,932
Total - - - *Rs.*	20,574	23,016

Married men's quarters.

497. The remaining work of the married men's quarters, consisting chiefly of granite flooring to the verandahs, and plastering the basements has been completed; but the upper story flooring of six rooms remains to be fitted up for use as solitary cells.

School and library rooms.

498. The furniture of the school and library has been completed and handed over to the barrack department.

Hospital drains.

499. The granite drains and discharge culvert of the hospital square has also been finished, and about one-half of the stonework for the drains of the barrack square is ready.

Upper storey of the Staff quarters.

500. The asphalte flooring of the upper storey of the staff quarters has been removed and re-placed with teakwood.

Repairs to reservoir.

501. The condemned portion of the reservoir has been removed. The body of the work has also been thoroughly repaired, and the whole of the water service appears to be answering well.

Other new works in progress.

502. Other new works have also been undertaken and finished, but none of them need special mention.

Forest road and Coonoor ghat.

503. The Forest road and the Coonoor ghât has been kept in thorough repair. On the latter the traffic has greatly increased during the year.

Nurseries.

504. Many trees have been planted, and a nursery established for the plantation; but owing to the unusual dryness of the season, several trees have died. Those, however, obtained from the nursery and planted on the sides of the cantonment roads have thriven well.

Road to Peat Bog.

505. The road to the Peat Bog has been repaired, and a small sum has also been expended on the cantonment roads, but owing to the original sum sanctioned for the latter having been disallowed, they are not in such good order as they ought to be.

Repairs to Military buildings.

506. All the military buildings have been repaired where necessary, and are in good order.

Public works on the Neilgherries.

507. Besides the buildings at Wellington, the whole of the public works on the Neilgherries and the ghâts leading thereto have been placed under the charge of the executive officer, who, in addition to his special duties, has prepared 80 estimates, many of extensive projects requiring much personal consideration. The following testimony is borne by the late collector, Mr. Thomas, to Captain Farewell's exertions: "I should do you less than justice if I failed to say that in 14 years of duty here I have never seen the roads and ghâts and works generally in such good order as since they have been in your charge."

Rates of labour, &c.

508. The rates of labour have remained unchanged during the year. Labourers also and artificers have been easily obtained when required.

PUBLIC WORKS ACCOUNT AND AUDIT DEPARTMENTS.

Appointment of a special officer to the Audit branch of the Public Works Department.

509. In December 1861, it was determined that a special officer should be appointed to secure an independent audit in the Public Works Department, and simultaneously therefore with the appointment of the chief engineer as Secretary to Government, and in order that no extra expense might be incurred, the assistant to the chief engineer was placed in charge of the Audit Department, and subsequently Lieutenant-Colonel Rundall, Deputy Secretary to Government, Public Works Department, assumed charge of the office.

Work performed in Bill branch.

510. The following statement exhibits the work performed in the Bill branch in 1861–62, as contrasted with that of the previous year.

—	Bills received during the Year.		Disposed of.		Remaining on hand on the 30th April 1862.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		Rs.		*Rs.*		*Rs.*
1860–61 -	12,386	66,39,195	12,388	71,43,190	212	83,583
1861–62 -	8,611	59,12,258	8,822	59,95,823	1	18

Comparison of work performed in 1861–62 with that done in 1860–61.

511. The difference in the number of Bills received in 1861–62 is due to the greater portion of the arrears in Tanjore having been worked out in 1860–61. Thus while in the latter year the number of bills disposed of relating to that district was 4,229 for 16,01,364 rupees, in 1861–62 it was 1,802 for 3,90,053 rupees. The number of bills objected to in 1861–62 have been less than in the previous year, evidencing that greater care has been exercised by district engineers and their subordinate officers in their preparation.

Number of bills above and below 1,000 rupees received.

512. During the year under review 7,635 bills have been received for works below 1,000 rupees, and 1,187 bills for works above that amount.

513. A portion

513. A portion of the permanent establishment of the Audit Department has been engaged on the adjustment of the expenditure of the years 1855-56, 1856-57 and 1857-58. That work which has been attended with some difficulty is almost completed, and the services of a temporary establishment employed to supply the places of those of the permanent establishment above adverted to, will shortly be dispensed with.

Bill Registers for the year 1860-61.

514. The bill registers for the year 1860-61 are almost all closed. Bills, however, to the extent of *Rs.* 2,04,187. 6. relating to the expenditure of that year, have been returned for explanation of doubtful items.

Total amount of Bills disposed of.

515. The aggregate sum accounted for in bills disposed of during the past year is 59,95,823 rupees, an amount much in excess of the average yearly expenditure, inasmuch as it includes that incurred in previous years. There are no current arrears in the department.

Amount of travelling allowance passed.

516. Travelling, &c., allowances to officers of the engineering department, and to executive agents in charge of ranges, have also been passed; out of 1,607 bills, amounting to *Rs.* 1,18,290. 10. 3., submitted for audit, *Rs.* 6,570. 13. 1. were retrenched, or about 5½ per cent, on the whole amount.

Amount of Contingent Bills.

517. Contingent bills to the amount of *Rs.* 5,637. 15. 10. have also been passed for the conveyance of office records, tents, &c., as well as bills amounting to *Rs.* 86,987. -. 10. for setting up steam tugs, dredges, punts, and machinery.

Work performed in the account branch.

518. The work done in the account branch consisted of the compilation of accounts and financial statements for the Accountant General, and for Government, and does not call for special notice.

MADRAS IRRIGATION AND CANAL COMPANY.

519. In the last Administration Report it was notified that Government had authorised the resumption of active operations, and had on the 31st May 1861 sanctioned estimates for 4,60,000 rupees for the first 17 miles of the Main Canal, from the village of Soonkasala, on the Tumbuddra, to the town of Kurnool.

Estimates sanctioned during the year.

520. During the year the following estimates have also been sanctioned:—

Rupees 1,25,000 for an anicut across the Tumbuddra at Soonkasala, with head works to the canal.

Rupees 1,45,000 for an aqueduct of 14 arches, 40 feet span, with a water-way of 94 feet across the River Hindri, capable of discharging upwards of 4,00,000 cubic yards per hour.

Rupees 7,22,500 for the Main Canal from the 18th to the 43d mile, with the attendant masonry works.

Rupees 5,19,830 for the Main Canal from the 44th to the 72d mile. This latter includes the cutting through the water-shed which separates the river Kundar, a tributary of the Pennar, from the valley of the Tumbuddra and of the mountain stream Bowanassy.

Rupees 5,520 have also been sanctioned for distributing sluices in the first 17 miles.

Besides the above, 13,488 rupees have been sanctioned for various buildings connected with the works; making a total of 19,91,338 rupees sanctioned for estimates submitted during the year.

Estimates forwarded to the consulting engineer and still under examination.

521. Estimates amounting to 3,02,000 rupees have also been forwarded to the consulting engineer's office, for the extension of the canal into the valley of the Kundar from the 73d to the 92d mile, inclusive of lockage for a descent of 200 feet, and also for the whole of the works in the Nellore district, commencing from Someswaram in the gorge of the river Pennar, and extending to Kistnapatam on the coast. These estimates, amounting to 11,75,833 rupees, will be shortly submitted for the sanction of Government.

Progress made during the year.

522. The progress made on the works hitherto has been as follows:—

Main Canal from Soonkasala and Kurnool.

523. The first 17 miles of canal have been nearly completed, and it is expected that water will be admitted during the present season, sufficient to irrigate the land lying between Soonkasala and Kurnool, and to supply the town for municipal purposes.

Anicut at Soonkasala.

524. The anicut across the Tumbuddra, founded on rock, has been raised all across the river, sufficient to afford a supply of three feet during the present season, and a total expenditure of 62,280 rupees incurred thereon.

Aqueduct.

525. The aqueduct over the Hindri is a work of great magnitude. The foundations, based on rock, have been completed, with the exception of those of the southern wing-wall; and the piers and abutments raised to nearly their full height, a total of 32,460 rupees having been expended thereon.

Main Canal from Kurnool to Water-shed.

526. Of the 55 miles of Main Canal between Kurnool and the water-shed 12 are in hand.

Progress made in the survey of the remaining portions of the line.

527. Besides the executive operation, surveys have been completed of the Main Canal for a length of 64 miles from Nundial to the head of the river Vaikalar, a feeder of the Kundar, and estimates nearly completed for 14 miles, and in good progress for the remaining 50 miles. Further surveys of the line from the junction of the Kundar and Pennar as far as the gorge at Someswaram, a distance of 60 miles, have been completed; but the plans and estimates have been delayed in consequence of the sickness which has overtaken the establishment engaged thereon.

Portion yet unsurveyed.

528. The only link as yet unsurveyed, is the portion lying between the head of the Vaikalar and the confluence of the Kundar and Pennar, a distance of 25 miles.

Exploration of sites for reservoirs discontinued, pending decision regarding the Mauri Canavai.

529. All exploration and surveys for fixing sites for reservoirs, have been discontinued, pending the decision of Government with respect to the site in Mysore at the Mauri Canavai. In proceedings of Government of the 12th April 1862, No. 742, information was conveyed to the agent, that the Mysore authorities intended to construct the reservoir at the site themselves, but they were willing to hand over the site on the river Buddra at Luckowally to the Irrigation Company.

Number of labourers employed on the works.

530. The numbers of labourers employed during the past year, have varied from 14 to 20,000 per month.

Expenditure during the year, particulars given in Appendix.

531. The gross expenditure during the year has been 7,58,949 rupees, the particulars of which will be found in the Appendix.

Total expenditure in India from the commencement.

The total expenditure in India from the commencement up to 30th April last, amounts to 14,41,633 rupees; the sum drawn from the Government Treasury has been 18,34,560 rupees, leaving a cash balance at that date of 3,95,548 rupees, inclusive of *Rs.* 2,620. –. 11., on account of miscellaneous receipts by the agent.

Progress made in each division of the work given in the Appendix.

532. The progress made in each division of the work as compared with the estimates, will be seen from the Appendix.

Quantity of land made over to the Company, and the amount of compensation paid for private property.

533. The quantity of land made over by the revenue authorities for occupation by the works has been 1,969 acres, of which 1,004 acres belonged to Government, and 965 acres to private individuals. The amount of compensation paid in cash has been *Rs.* 8,290. 1.

Decision of Government on the water-rate to be paid to the Company.

534. The subject of the rates to be paid to the Company for their water and the mode of collection, that has been discussed during the past year. The Government, in their order* of the 10th May 1862, considered that a consolidated wet assessment would be the fairest mode of dealing with the question as between the Company and the ryots, and that between the Company and the Government the difference between the wet and dry assessments should be the measure of the amount credited to the Company.

* No. 1,036.

Mode of collecting the returns.

535. They likewise ruled that the collection of the assessment is to be left to the Government, that their officers were to be the judges of the nature and extent of remissions, and that a reasonable charge for collection was to be placed to the debit of the Company.

Distribution of the water to be left to the Company.

536. The distribution of the water, the Government considered, should be left altogether to the Company, who, having constructed the works, should maintain them in repair; but that at the same time, as the Government have, by guaranteeing the interest of the capital, a distinct interest in the maintenance of the works, the collector should, through his officers, be kept cognizant of the state and condition of the works.

Loss from existing wet cultivation being interfered with to be made good by the Company.

537. They ruled further, that all existing wet cultivation should be carefully ascertained, and its area excluded from the account, as between the Company and the Government, and that if the Company's works interfered with the supply to these lands, the loss was to be made good; but if by their means the lands became available for a second crop, there would be a fair claim against the Government for any assessment resulting from such an application of the additional water.

A rate of three rupees per acre to be charged for the present.

538. In a subsequent order, the Government observed that the consolidated assessment could not be immediately imposed; but as the Company's chief engineer expected to be able shortly to supply water to the tract of land between Soonkasala and the Hindri, as well as to Kurnool, and its suburbs, some temporary arrangement must be made, and they therefore decided on allowing a separate water-rate of 3 rupees per acre to be charged in addition to the dry assessment, crediting the same to the Company.

The above arrangement to be considered purely temporary, pending the completion of the survey and settlement operations.

539. This rate, the Government observed, had been ordered for the Godavery Delta, and they were not prepared to allow of a higher charge at present in Kurnool. This arrangement, however, is to be considered as a purely temporary one, adopted solely because the consolidated assessment cannot be carried out until further progress had been made in the operations of the Revenue Survey and Settlement Departments, who have been desired to push on their work as rapidly as possible, so as to admit of its early introduction.

RAILROADS.

Work executed.

540. During the official year 1861-62, the engineers of the Madras Railway have been engaged in carrying on the construction of the South-West and the North-West lines, and the Bangalore Branch, and the engineers of the Great Southern of India Railway have proceeded with the construction of the line between Negapatam and Trichinopoly.

Quantities.

541. The average quantities of earth-work, masonry, &c., executed monthly, as obtained from the Progress Reports from the 1st May 1861 to the latest date up to which the returns have been received, have been—

	MADRAS RAILWAY COMPANY.			Great Southern of India Railway.
	S. W. Line.	N. W. Line.	Bangalore Branch.	
	C. Yards.			
Earth-work	26,073	99,648	86,310	86,023
Masonry	1,004	2,829	10,095	2,204
Ballasting	35,103	8,799	1,843	—
Permanent way	11,604 S. yds.	2,673	- -	9,408
Fencing	11,067	2,914	6,557	8,476

Portions of the South-west line open to traffic.

542. On the 1st May the western division of the Madras South-West line was extended 9¼ miles from Tiroor to Cootipooram, and, on the 23d September 1861, 11½ miles more from the Cootipooram to the Puttamby Station. On the 1st December a portion of the eastern section, 24 miles in length, between Salem and Senkerrydroog, was opened to the public. On the 14th April 1862 the opened portion of the western division of the South-West line was extended from Puttamby to Coimbatore, a distance of 64¾ miles.

Extension of the North-west line.

543. On the 8th December 1861, the opened portion of the North-West line was extended from Naggery to Poottoor, a distance of 9¾ miles.

Total length of open portion of Madras Railway.

544. The total length of the open portion of the Madras Railway on the 30th April was 362 miles, of which 335¼ miles belonged to the South-West line, and 26¾ miles to the North-West line.

The fares charged during the year were as follows:—

	Per Passenger.			Per ton of Goods.			
	1st Class.	2nd Class.	3rd Class.	Special Class.	1st Class.	2nd Class.	3rd Class.
	a. p.	*a. p.*	*a. p.*	*a. p.*	*a. p.*	*a. p.*	*a. p.*
From the 1st May 1861 to 15th September 1861	1 –	– 6	– 2	– –	– 8	– 10	1 –
From the 15th September 1861 to 30th April 1862	– 8	– 4	– 2	– 8	– 9	– 11	1 1

Number of passengers carried and revenue therefrom.

545. The number of passengers, and the quantities of goods carried, and the revenue derived therefrom during the official year, were as follows:—

SOUTH-WEST LINE.					NORTH-WEST LINE.				
Passengers.	No.	*Rs.*	*a.*	*p.*	*Passengers.*	No.	*Rs.*	*a.*	*p.*
1st Class	7,359	18,592	–	4	1st Class	300	257	14	4
2d "	39,599	42,816	5	4	2d "	3,598	1,331	–	–
3d "	10,97,274	4,58,311	1	10	3d "	1,29,585	19,055	3	2
Goods.	Maunds.				*Goods.*	Maunds.			
Special Class	3,18,595	37,117	6	2	Special Class	56,857	1,643	5	–
1st "	14,54,462	2,55,406	2	6	1st "	1,58,472	4,664	15	5
2d "	12,12,390	2,72,755	15	9	2d "	1,75,766	7,777	13	8
3d "	1,51,977	39,653	4	7	3d "	17,761	929	6	11

Principal Officers employed on Madras Railway.

546. The principal officers employed in India by the Madras Railway Company on the 1st May 1861 were—

1 Agent and Manager.
1 Chief Engineer.
1 Traffic Manager.
1 Assistant ditto.
1 Chief Accountant.
1 Deputy ditto.
1 Locomotive Superintendent.
1 Assistant ditto.
5 First-class Engineers.
11 Second-class ditto.
19 Third-class ditto.
2 Chief Clerks and Cashiers.
1 General Storekeeper.
1 Accountant in the Engineer Department.

Advances to the Madras Railway Company.

547. The advances made to the Madras Railway Company during the year were—

	Rs.
For Construction - - - - -	35,11,000
„ Stores - - - - - -	6,85,000
„ Sleepers - - - -	7,80,000
„ Rolling Stock - -	1,50,500

For Salaries.

	Rs.	a.	p.
Agent's Establishment - - -	79,914	10	–
Engineer and Telegraph Departments -	4,72,231	1	8
Locomotive - - ditto -	95,171	15	–
Contingencies - - - - -	30,895	15	–

Total expenditure sanctioned.

548. The total expenditure sanctioned by Government from the commencement in March 1853 up to 31st December 1861, amounts to *Rs.* 3,49,94,166.1.10.

Sections of the Great Southern of India Railway opened.

549. The Great Southern of India Railway line has been opened in sections as follows:—

From Negapatam to Trivallore - 14 miles, on the 15th July - 1861.
„ Trivalore to Tanjore - 35 „ „ 2nd Dec. „
„ Tanjore to Trichinopoly 30 „ „ 11th March „

Principal officers employed on the Great Southern of India Railway.

550. The principal officers employed in India by the Great Southern of India Railway Company on the 1st May 1861 were—

1 Agent.
1 Chief Engineer.
1 First-class ditto.
2 Second-class Engineers.
2 Third-class Engineers.
1 Accountant.
1 General Storekeeper.

Advances to the Great Southern of India Railway.

551. The advances made in India to the Great Southern of India Railway Company were:—

	Rs.	a.	p.
For Construction - - - - - - - -	7,10,000	–	–
„ Stores - - - - - - - -	1,45,000	–	–
Agency Contingencies - - - - - -	2,723	11	5
Rolling Stock - - - - - - - -	30,000	–	–

For Salaries.

	Rs.	a.	p.
Agency - - - - - - - - -	49,273	2	–
Engineer and Telegraph Departments - - -	1,13,904	5	–
Locomotive Department - - - - - -	13,224	11	–

Expenditure sanctioned by Government.

552. The total expenditure sanctioned by Government, from the commencement of the works in October 1858 up to 31st December 1861, amounts to *Rs.* 28,85,336. 4. 11.

MARINE.

Transport of troops less frequent

553. The transport of troops by sea from Madras, has considerably diminished during the past two years. The forces in Burmah have been reduced from 11 native regiments to 3. The China war has been brought to a satisfactory conclusion; and, with a view to economy, no movements either by sea or by land have been made, except such as were imperatively called for. The consequence of this has been shown in a less expenditure of coal, and the ability to dispense with the services of the "Dalhousie," which vessel was sent to Bombay in November last, as being no longer required for service in this Presidency. The "Coromandel,

having been built expressly for Madras, has been retained; although she is a component part of the Indian navy, and is in commission.

Marine Acts.

554. The Marine Acts that have been passed during the year, having reference to this Presidency, are three: Act XXVIII. of 1861, and Acts I. and II. of 1862.

Act XXVIII. of 1861.

555. The first authorises all courts having Admiralty Jurisdiction in India, and the principal Court of Ordinary Criminal Jurisdiction at every port having no Court of Admiralty Jurisdiction, to make inquiries into charges of incompetency and misconduct on the part of any master or mate, as contemplated by Section 242 of the Merchant Shipping Act of 1854, and Section 82 of the Indian Merchant Seaman's Act I. of 1859.

Act I. of 1862.

556. The next, which is the first Act passed by the Local Legislative Council legalises the levy of port dues at the port of Ganjam, at the rate of one anna per ton on square-rigged vessels, and half that sum on native craft employed solely in coasting voyages.

Act II. of 1862.

557. The last extends the provisions of Act XXV. of 1859, for preventing the overcrowding of native passenger ships in the Bay of Bengal, to vessels leaving Ceylon for India.

Boat and Pier Acts.

558. The Pier Act, and a new Boat Act have likewise been passed; but they have not yet been promulgated, pending the assent of the Governor General of India.

559. There are now eighteen ports under the Ports Conservancy Act, which seems to work well, and to give general satisfaction. Occasionally on the Malabar coast, where sometimes a passenger has been landed from a ship without anchoring, under the impression that dues were not thereby incurred, dissatisfaction has been expressed when the due has been demanded, and payment enforced; but the legal authorities at Madras and Calcutta, having decided on the liability, no late attempts to evade the payment have been made. The figures against the ports, in the margin, represent the maxima of dues per ton, allowed by law to be levied, and the actual dues now charged.

CONSERVANCY PORTS under Act XXII. of 1855.

——	Maximum.	Actual.	——	Maximum.	Actual.
	Annas.	*Annas.*		*Annas.*	*Annas.*
Ganjam - - -	1	1	Tranquebar - -	1	1
Monsoorcottah - -	1	1	Negapatam - -	1	1
Calingapatam - -	1	1	Paumben - -	0	0
Bimlipatam - -	1	1	Tuticorin - -	3	3
Vizagapatam - -	1	1	Cochin - - -	2	2
Cocanada and Coringa	3	2	Calicut - - -	1	1
Masulipatam - -	1	1	Tellicherry - -	1	1
Madras - - -	3	3	Cannanore - -	1	1
Cuddalore - -	1	1	Mangalore - -	1	1

Revision of Establishments at Out-ports and Lighthouses.

560. In many of the ports, the duties of the conservator are undertaken by the superintendent, or manager of sea customs, and up to the present time, these duties have been performed without remuneration. In the course of the year under review, Mr. C. R. Pelly, member of the Board of Revenue, was directed by Government to revise, in communication with the superintendent of marine, the marine establishments at the out-ports, and at the lighthouses. Some places had increased in importance since the establishments were fixed; and at nearly all, wages had risen so considerably, that efficient servants could not be procured at the original rates. It was also thought expedient that those local sea custom officers, upon whom, from there being no marine officer at the port, devolve the duties of conservator, should receive a moderate remuneration for the services thus rendered. The alterations recommended by Mr. Pelly, and approved by the Government, have raised the cost of the marine establishments from *Rs.* 8,555.12.0. per annum to 9,617 rupees, and this increased expenditure has received the sanction of the Supreme Government.

Port Funds.

561. In Appendix A. will be found the receipts and disbursements in connexion with the port funds at each port; the principal being, although there are exceptional cases differing from this rule, that two-thirds of the marine establishments and expenses shall be borne by the port fund, and one-third by the Government; the former, however, bearing the entire expense of the port lighthouses.

The usual statement of the trade of the ports, follows in Appendix B.

Pilgrim ships.

562. Several vessels have been fined at Cochin for infringing the provisions of Act XXI. of 1858. It must, however, be admitted, that in some cases they appear to have been led into error by the authorities at the ports whence they took their departure.

Floating Police.

563. The floating police continues to be of service in checking depredations in boats, and no change is contemplated.

Wrecks:—
Loss of "Albion," "Hersilia," and "Alert."

564. In consequence of the frequency of wrecks on the Coromandel coast, a coast presenting few dangers, and these avoidable with ordinary skill and care, inquiries under Section 100, of Act I. of 1859, have been instituted, regarding the loss of three: namely, the "Albion," wrecked near Nursapoor in May; the "Hersilia," wrecked near Poondy in June; and the "Alert," near Cuddalore in October. The first two were proved to be cases of gross carelessness; the latter appeared to be more an act of wilfulness. The reports of the committees ordered to investigate the circumstances, were sent to the Board of Trade.

In Appendix C. will be found a brief statement of the wrecks that have occurred.

Examinations in Navigation and Seamanship.

565. Few masters and mates have offered themselves for examination during the past

year. The numbers passed since the Board of Examination was established are as follows:—

7	Masters	Competency	Foreign Trade.
3	Ditto	Service	
8	Mates	Competency	
4	Ditto	Service	
1	Ditto	Competency.	Home Trade.

Infractions of Native Passengers' Act XXV. of 1859.

566. Several instances have been brought to light of evasions of this Act by vessels clearing out at Negapatam and Nagore for the Straits and Burmah, and then touching at Karikal, and there receiving more passengers than could have been legally embarked at our own ports. Endeavours have been made to convict the offenders at the ports of discharge, but in some cases the surplus passengers had been disposed of before a scrutiny could take place; and in others the magistrate, before whom the parties were arraigned, did not view the proceeding as an infraction of the law.

567. At present there are 14 vessels prohibited from engaging in this trade, consequent on their having been found committing glaring breaches of the Act.

Coast surveys.

568. No surveys have been in progress during the past year; all having been completed with the exception of that part of the Coromandel coast extending from the Santapillay Rocks to the north extreme of the Ganjam District.

569. The charts of the coast from Ennore to Point Calimere, the survey of which was completed by Lieutenant Sweny, Indian Navy, in September 1860, have not yet been furnished.

Packet line of steamers.

570. The line of mail steamers between Madras, the northern ports and Rangoon, which was commenced in January 1861, was continued till March 1862, the steamer, Rangoon, having left Madras for the last contract trip on the 11th February. With the reduced number of regiments in Burmah, it was found that the advantages of the line were not commensurate with the expense incurred; and, moreover, the arrangements, as well in respect to Government passengers as to the general public, were not of a character to merit confidence and encouragement. Complaints were constant; and, except latterly, generally unattended to; and on one occasion it became necessary to fine the contractors for their vessel leaving Cocanada without waiting the specified time, and before the mails could be put on board.

Proposed extensions of coastal communication.

571. Mr. J. Mackinnon, the managing partner of the Bay of Bengal Steam Navigation Company, came out in the beginning of the year, with the view of organising a comprehensive system of steam communication along the Indian shores. That portion which most affects this Presidency is a monthly line between Calcutta and Bombay *viâ* Paumben; the vessels to touch at fixed dates at all the intermediate ports. The offer has not yet been accepted; but as the subsidy asked is moderate (7,500 rupees per trip), it will probably soon come into operation.

Steam communication with Burmah.

572. Our communication with Burmah will be kept up by an occasional direct trip of a Government steamer, and *viâ* Calcutta by either the P. and O., or the coast steamers above-mentioned, and the Burmah steamers from Bengal, of which there will now be three every month, one of which will proceed on to the Straits.

Transport of troops.

573. The movement of troops by sea having been, as before stated, reduced to a minimum, no transports have been engaged during the past year, although it was necessary to embark a certain number of men on each trip of the contract mail steamer, to avoid having to pay forfeit, as Government guaranteed public freight and passage to the extent of 7,500 rupees on each trip.

In Appendix D. will be found a statement of the dates of departure and return of each vessel, the numbers carried, and the amount paid by Government, in addition to the subsidy of 4,500 rupees as freight and passage money.

The regiments moved by sea are:—

20th N. I. which had left Madras for the Straits in April 1861.
31st N. I. which had left Moulmein for Calingapatam about the same time, and arrived there on 13th of May.
22d N. I. from the Straits to Madras in May.
32d N. I. from Moulmein to Masulipatam in October.
42d N. I. from Rangoon to Masulipatam in October.
43d H. M.'s from Madras to Calcutta; one wing in October the other in February.
33d N. I. from Rangoon to Madras in December and January.
60th H. M.'s from Madras to Rangoon, by wings, in January and February.
69th H. M.'s from Rangoon to Madras, by wings, in February and March.
28th N. I. from Cocanada to Rangoon in March.
52d N. I. from Rangoon to Madras in April.

Steamers:
"Arracan," "Dalhousie," "Tubal Cain," "Sydney."
Sailing Transport:
"Sesostris."

574. The Government vessels employed are stated in the margin.

Troops to and from England.

575. The number of troops, invalids, &c., arrived from and embarked for England is shown in Appendix E., which likewise exhibits the rates paid.

Inconvenience and expense having occurred from troops landing in the Thames, who were destined for some other part of the United Kingdom, instructions were sent out to arrange for all vessels taking home regiments to touch at Falmouth, there to receive orders at what port to land them. But as this would manifestly increase the cost of passage very considerably, the modified course has been sanctioned, of requiring such vessels to call at Falmouth, and to land the troops at any port in the English Channel as may then be ordered.

Another slight alteration has been introduced in respect to invalids. Vessels having such passengers are to touch at Spithead, to enable the authorities to remove at once to Netley Hospital any men they may wish to place there.

Coals.

576. No further supplies of coals have been received from home during the year, except in completion of previous demands. The contract price has been 2 *l.* 9 *s.* 6 *d.* per ton, delivered into store. One or two small parcels have been purchased at Cochin and Cocanada, at prices varying from 18 to 20 rupees alongside. Appendix F. shows the quantity on hand at the various depôts on the 1st May 1861, the receipts and expenditure during the year, and the balance carried forward for 1862-63.

WEATHER.

Seasons.

577. The weather has generally been fine, and the surf less than usual, having been even in the north-east monsoon exceedingly moderate. Two cyclones have been experienced; one in the lower part of the Bay, from the 26th December to the 2d January; the other in the centre of the Bay, from 22d to 24th March. Neither of them reached as far as Madras, although the weather here on each occasion was very exceptional, showing that a disturbance was taking place at some distance.

The actual disbursements during the year under Report 1861-62, on account of the Marine Department, are as follows:—

	Rs.
Marine Superintendent's Office - - - -	24,912
Master-Attendant's Department - - - -	49,805
Board of Examiners in Navigation and Seamanship -	600
Shipping Master's Establishment - - - -	3,960
Marine Establishment at Outports - - - -	26,708
Lighthouses - - - - - - - -	17,080
Miscellaneous - - - - - - -	1,78,164
TOTAL - - - - *Rs.*	3,01,229

The ports and lights will now be noticed in the order previously observed.

GANJAM.

Ports in Ganjam.

578. This port has been brought under the operation of Act XXII. of 1855. It was found that the trade was considerably increasing, and that much difficulty was experienced from there being no sufficient local controlling authority. A superintendent of sea customs has therefore been appointed.

MONSOORCOTTAH, SONAPORE, BARWAH POONDY, BAPANAPAUDO, AND CALINGAPATAM.

No material alterations have taken place, nor is there anything calling for notice in any of these ports.

SANTAPILLAY LIGHTHOUSE.

Santapillay lighthouse.

579. A small store-godown is about to be constructed here, at an estimated expense of 132 rupees, in consequence of one previously in use having been blocked up by a masonry shaft, rendered necessary for the support of the lantern.

BIMLIPATAM AND VIZAGAPATAM

Ports in Vizagapatam District.

580. Serious complaints have been made of the inefficiency of the boats at Bimlipatam at which port trade has been lately much on the increase. The master-attendant of Vizagapatam, who has charge of both ports, used to visit Bimlipatam once a month to examine the boats and to inquire into the affairs of the port. He has now been directed to consider Bimlipatam as his permanent station, and to visit Vizagapatam once a month.

COCANADA AND CORINGA.

Ports in Godavery District.

581. A steam dredge is at work under the orders of the Public Works Department, clearing out the river and bar at Cocanada; but the shoal from Hope Island is still progressing northwards, although not with such rapid strides as in previous years.

Some addition has been made to the small lighthouse, but it is not yet complete.

The Hope Island light remains as before, and the three buoys laid down to denote the north and east limits of the bank are retained in position.

NURSAPORE.

Nothing to report.

MASULIPATAM.

Kistna District.

582. The trade of this port is very moderate, and did not warrant the costly establishment assigned to it. The expenses were far in excess of the revenues, the deficit on the 30th April 1861 being 6,539 rupees. The Government therefore determined, as the Port Establishment was kept up for State purposes, Masulipatam being the point of embarkation and disembarkation of troops and stores between Madras and Hyderabad, to charge the port only with the expenses incurred in keeping up the light on the Fort Flagstaff.

583. Two buoys were laid down at this port in 1859-60, one has broken adrift, both ends of the link of a 1⅞ inch having been found worn through. It has been determined not to replace it, as the buoy left clearly indicates the anchorage.

POINT DIVI AND ARMEGHON LIGHTHOUSE.

Lighthouses at Point Divi and Monapollium.

Nothing new to report.

PULICAT LIGHTHOUSE.

Lighthouse at Pulicat.

584. This column has been completed and the lantern put up. As yet, however, no sufficient accommodation has been prepared for the light keepers, who live in the town separated from the lighthouse by the backwater.

The light, which shows red by means of coloured glass, has been exhibited since the 1st April last; but as the attendants are new to their work and failures must at first be anticipated, no official or public intimation of it has been given.

MADRAS.

Port of Madras.
Time-ball.

585. The time-ball has not been working well of late, in consequence of some defect in the apparatus for releasing it, the management and control of which is now exercised by the superintendent of electric telegraphs, while the signal for dropping the ball is of course given by the government astronomer. The Government have suggested that the latter should have the whole management, the superintendent of marine affording such assistance as the means at his command will admit.

Pier.

586. The pier, so far as the contractor's work is concerned, is nearly completed, but its connexion with the Custom House has yet to be commenced; estimates to the amount of 64,277 rupees have been sanctioned for this work, for rolling stock and for laying down pipes for watering the shipping from the pier end; and the work will now be immediately commenced.

Screw moorings.

587. The contract provides for laying down 13 screw moorings round the pier head. It was at first intended to dispense with these, and to substitute in lieu a wave screen along the entire length of the outer side of the T head. This arrangement was subsequently reversed; the screen was considered ill adapted for the position it would occupy, and the moorings have been called for.

Pier opened to passengers.

Pier Establishment:	*Rs.*	*a.*	*p.*
2 Boatswains at 35 rupees each -	70	–	–
4 Toll-takers at 15 rupees each -	60	–	–
1 Duffadar - - - -	10	8	–
6 Peons at 7 rupees each - -	42	–	–
Total - *Rs.*	182	8	–

588. In accordance with one of the provisions of the contract, the pier was opened to passengers on the 1st December last, and from the 1st of January a toll of two annas has been levied on all persons embarking from or landing at the pier; a small temporary establishment having been entertained to collect the tolls and to preserve order.

The receipts and expenses under this arrangement are as follows:—

1861:		*Rs. a. p.*	1861:		*Rs. a. p.*
December -	Tolls - -	– – –	December -	Establishment	122 8 –
1862:			1862:		
January - -	ditto - -	266 14 –	January -	ditto - -	182 8 –
February -	ditto - -	431 10 –	February -	ditto - -	182 8 –
March - -	ditto - -	360 8 –	March - -	ditto - -	182 8 –
April - -	ditto - -	150 8 –	April - -	ditto - -	182 8 –
				Contingencies	87 4 7
	Total - *Rs.*	1,209 8 –		Total - *Rs.*	939 12 7

Since the commencement of the pier no damage has occurred to it from collision or other cause.

589. Ships

Supply of water to ships.

589. Ships in the Madras Roads have always been permitted to take water free of expense from one of the cisterns fed from the Seven Wells. The general public are charged for this water, and it has been ruled that the shipping shall also pay for it. A fee of two annas per ton has consequently been ordered to be levied on all water supplied on and after the 1st May 1862.

Dredge hauled out over the Cooum bar.

590. In November last, a large steam dredge, which had been built on the banks of the Cooum, was successfully hauled out over the bar, without at any time taking the ground. The "Dalhousie," which was in the roads at the time, towed her at once to Negapatam, for which port she was destined.

Diving bell.

591. The diving bell is in good working order, but as there have been no gales of late, its services have not been called into play.

Ports in South Arcot.

CUDDALORE, PORTO NOVO.

Nothing new to report.

TRANQUEBAR.

Ports in Tanjore.

592. The new flagstaff has been erected here.

NAGORE, NEGAPATAM, POINT CALIMERE BEACON.

Nothing of consequence to note.

PAUMBEN.

Paumben channels.

593. The operations for deepening the Paumben Channels have not resulted in any great accession of depth over that which had been attained at the end of last year, for it is found that the southern passage, which is through sand, silts up fast; a contingency which was formerly pronounced to be improbable, if not impossible. Labour has been employed in keeping this clear, and in cutting away an elbow in the North Channel, which offers a serious impediment in that part of the passage. The district engineer considers that about 18 or 24 months, according to weather, will be required to complete the whole of the passage to 13 feet depth at low water, neap tides, with a breadth of 150 feet; that the cost will be 70,000 to 80,000 rupees; and that it will require an annual expenditure of about 3,500 to 4,000 rupees to keep it open.

At present the depth may be safely stated at 11 feet low water throughout.

A new flagstaff was to have been put up, but it has now been determined to fix a small staff for this purpose on the lighthouse, which will answer equally well, and entail only about a fifth of the intended outlay.

The steam tug for towing vessels through the Pass is still under construction at Cocanada, and will be launched in August next.

The pilot fees have been raised 25 per cent. from the 1st of May 1862, *vide* Appendix G., and the pilots' share reduced, from that date, from one-fourth to one-fifth, which leaves their emoluments as they were before The usual statements of the tonnage that has passed through during the year, and of the pilotage levied, are to be found in Appendices H. and I. The returns show a decrease on last year, but this is to be accounted for by the general depression of trade caused by two dry seasons.

KEELAKARRY.

594. Nothing new to report.

Madura District.

The total pilotage levied during the year between Paumben and Keelakarry, was 3,737 rupees, of which 2,987 rupees were the pilot's share, and 750 rupees were credited to Government.

TUTICORIN.

Tinnevelly District.

595. Nothing to report, except that a successful pearl fishery has been held, particulars of which will appear in the revenue report.

ALIPEE.

New light at Alipee.

596. This port is in the territory of the Rajah of Travancore, but it will not be out of place to record here that a brilliant revolving light has been displayed from a column at this port since the 28th March last, the elevation being 131 feet above the mean sea level, and the flashes appearing once a minute, visible about 18 miles off.

COCHIN.

Ports in Malabar.

597. In the last year's report mention was made of an arrangement whereby the pilotage fees were to be divided between the Government and the licensed pilot, in the proportion of three-fifths to the latter, and two-fifths to the former, to be appropriated towards the expense of keeping up the buoys and other facilities for entering the port. If the pilot's share fell short of 1,800 rupees during the year, or 150 rupees a month, the amount was to be made up to this at the end of the year. The system came in force on the 1st November 1860,

since which, up to the 30th April 1862, 5,510 rupees were collected, 2,204 rupees being the Government or port fund share, and 3,306 rupees that of the pilot, who has consequently averaged a monthly income of nearly 184 rupees.

Consequent on the accession of these fees, on the increase in the port due, and on the trade having been drawn from Alipee, owing to the late change in the Sea Custom tariff, the port fund, which before barely paid the expenses, shows a surplus of 5,660 rupees.

Ship-building is on the decline, occasioned, as the master-attendant states, by the scarcity and dearness of teak timber, and the facilities offered to native British subjects for obtaining British registers for foreign ships.

The flagstaff is in need of repair; but the boats, buoys, and the lantern are reported to be in good order.

During the past year it was brought to notice by the master-attendant that a mud bank, similar to the well-known one at Alipee, existed about five miles north of Cochin. He was directed, therefore, to watch it during the south-west monsoon; and the result is that during the heaviest weather of the monsoon, which however was of a moderate character, the water on the bank, as far as five fathoms, was perfectly smooth, and not a ripple was found on the shore. This is owing to the ocean undulations stirring up the soft mud of which the bank is composed, and thus deadening the force of the sea. The bank commences about five miles north of Cochin, and continues for three or four miles northwards, extending to sea to about five fathoms; and as it affords excellent anchoring ground during the south-west monsoon, when the rest of the coast, with the exception of Alipee, is dangerous, a flagstaff is about to be erected there for the guidance of shipping when seeking shelter.

The usual tables will be found in Appendices J., K., L., showing the vessels built at Cochin and the neighbouring ports, and the pilotage fees and tonnage.

CALICUT.

Nothing to report.

TELLICHERRY.

598. A new flagstaff is in course of erection, from which, as formerly, a high light as well as a low one, will be exhibited.

CANNANORE.

Nothing to report.

MANGALORE.

South Canara.

599. A new flagstaff has been sanctioned for this port.

COOMPTA, TUDDRI, SEDASHEGUR.

North Canara.

600. Two beacon buoys and moorings were sent round to Tuddri in October last by the "Dalhousie," for the purpose of marking off the channel into the port; and by the same vessel a large quantity of stores was sent to Sedashegur to be used in the improvements about to be undertaken at that port. North Canara was, however, transferred to the Presidency of Bombay on the 16th April last, and as these three ports are included in the district, they have passed from the control of the Madras Government.

FINANCIAL.

ACCOUNTANT GENERAL'S DEPARTMENT.

601. Review of Actual Results of 1861–62, compared with the Actuals of 1860–61.—The present financial review is not, as in previous years, confined to a comparison of the actual results of the preceding official year with the estimated results of the year which has just closed, but a comparison of the actuals of 1860–61, with the actuals of 1861–62, with the exception of the interest on local loans and donations and contributions from Government to service funds and other charitable institutions, the former amounting to about five, the latter to about 13½ lacs of rupees, which have been necessarily estimated, as full returns have not been as yet received. The difference of exchange on transactions with the home Government is also an estimate. The above improvement is owing to the new system of accounts and the more punctual submission of returns than hitherto.

602. Land Revenue.—The amount of revenue actually realised in 1861–62 from land, was 4,08,19,670 rupees.* The actual collections of the previous year were 3,99,86,680 rupees,† being an increase of about 8½ lacs in the collections of the past year, or rather more than two per cent. above the collections of 1860–61. This result is ascribable to the season having been more favourable in the last than in the previous year.

	Rs.
* Current	3,94,21,430
Arrears	13,98,240
	Rs. 4,08,19,670
† Current	3,88,69,590
Arrears	11,17,090
	Rs. 3,99,86,680

603. **Salt Revenue.**—The next considerable source of revenue is salt. The actual receipts in 1861-62 amounted to 86,52,620 rupees. This, as compared with the receipts of the preceding year, viz., 70,67,890, shows an increase of 15,84,730 rupees, or 22¼ per cent. above the realisation of the previous year. This increase is partly due to the price of salt having been raised, during the past official year, from 1-6 to 1-18 rupees per Indian maund.

	Rs.
Actual of 1861-62 - - -	86,52,620
Ditto of 1860-61 - - -	70,67,890
	Rs. 15,84,730

604. **Tribute.**—The income from tribute is fixed, and amounts annually to the sum of 34,46,430 rupees.

	Rs.
Rajah of Mysore - - - - - - - - -	24,50,000
„ of Travancore - - - - - - - - -	7,83,110
„ of Cochin - - - - - - - - -	2,00,000
„ of Travancore on account of the late Nabob of the Carnatic	13,320
	Rs. 34,46,430

605. **Abkaree.**—The collections from this source amounted in 1860-61 to 31,54,840 rupees, and in 1861-62 to 33,33,930 rupees, being 1,79,090 rupees, or about 5½ per cent. above the collections of the previous year. This favourable result is owing to the Abkaree farms having been leased out, in the year under review, at higher rents.

	Rs.
Actual of 1861-62 - - -	33,33,930
Ditto of 1860-61 - - -	31,54,840
	Rs. 1,79,090

606. **Land and Sea Customs.**—The receipts from these sources amounted in 1860-61 to 29,53,880 rupees, and in 1861-62 to 23,79,140 rupees, being nearly 5¾ lacs, or 19½ per cent., below the actual of the preceding year. This falling off is ascribed to the high rates of duty on staples, which it is believed has checked speculation. The actual collections for the past four years from sea customs alone, are entered in the margin.* A table is also annexed, showing the principal imports and exports at the port of Madras during the past three years.

	Rs.
Actual of 1860-61 - - -	29,53,880
Ditto of 1861-62 - - -	23,79,140
	Rs. 5,74,740

	Rs.	Per centage
		Increase.
*In 1858-59 -	13,31,636	
„ 1859-60 -	22,97,836	72½
„ 1860-61 -	26,01,344	13¼
		Decrease.
„ 1861-62 -	20,92,746	19½

IMPORT DUTIES.	Actual of 1859-60.	Actual of 1860-61.	Actual of 1861-62.	Per-centage of the Net Increase and Decrease of the One Previous Year.	
	Rs.	*Rs.*	*Rs.*	Increase.	Decrease.
Spirits of Wines - -	1,54,913	1,72,502	1,55,442	- -	9¾
Cotton twist and yarn -	1,51,053	3,10,777	1,40,592	- -	54¾
Cotton piece goods -	2,28,804	3,07,546	2,37,476	- -	22¼
Malt liquor - - -	81,886	66,115	41,785	- -	36¾
Coral - - - -	14,119	15,306	9,597	- -	37¼
Metal - - - -	1,36,266	1,48,190	1,69,265	14¼	—
Gold and silver lace and thread.	- -	22,533	31,578	40	—
Woollens - - -	- -	17,158	18,942	10¼	—
Total of the above Import Duties - *Rs.*	7,67,041	10,60,127	8,04,677	- -	24

EXPORT DUTIES.	Actual of 1859-60.	Actual of 1860-61.	Actual of 1861-62.		
	Rs.	*Rs.*	*Rs.*		
Indigo - - - -	80,580	47,558	77,618	63¼	—
Cotton piece goods -	16,103	19,780	23,375	18¼	—
Hides and skins - -	29,832	33,346	29,465	- -	11½
Rice - - - -	22,839	3,752	2,584	- -	31
Seeds - - - -	1,433	1,891	2,651	40¼	—
Coffee - - - -	2,927	Free under the present Act.	—	—	—
Saltpetre - - -	1,487	12,033	26,848	123	—
Total of Export - - *Rs.*	1,55,201	1,18,360	1,62,541	37¼	—
Grand Total of above Import and Export Duties - - *Rs.*	9,22,242	11,78,487	9,67,218	- -	18

	Rs.
Actual of 1860-61	10,06,390
Ditto of 1861-62	3,49,500
	Rs. 6,56,890

607. **Moturpha and Duty on Arts, Trades, &c.**—The receipts under these heads have considerably fallen, owing partly to the operations of the income tax, whereby parties in the receipt of incomes of 200 rupees and upwards per annum, became liable to the latter tax, and were exempted from the Moturpha, and partly to the abolition in February 1862 of the duty on arts, trades, &c. The collections in 1861-62 amounted to 3,49,500 rupees, while in 1860-61 they amounted to 10,06,390 rupees, exhibiting a decrease of 6,56,890 rupees, or 65¼ per cent.

	Rs.
Actual of 1861-62	24,94,920
Ditto of 1860-61	10,14,270
	Rs. 14,80,650

608. **Income Tax.**—The actual receipts from this tax amounted in 1860-61, to 10,14,270 rupees, and in 1861-62, to 24,94,920 rupees, being nearly 15 lacs or 145⅘ per cent. above the collections in the previous year. It must be remembered, however, that the receipts for 1860-61 embraced a period of only nine months.

	Rs.
Actual of 1861-62	31,18,830
Ditto of 1860-61	15,25,650
	Rs. 15,93,180

609. **Stamps.**—The revenue from this source amounted in 1860-61 to 15,25,650 rupees, and in 1861-62 to 31,18,830 rupees, being nearly 16 lacs or 104½ per cent. above the actuals of the previous year. The increase during the last five years is shown in the following statements:—

	Rs.
In 1857-58	7,55,485
In 1858-59	8,06,169
In 1859-60	9,30,409
In 1860-61	15,25,650
In 1861-62	31,18,830

610. **Postal Collections.**—Under orders from the Government of India, the receipts and charges of the Postal Department have been exhibited, as imperial revenue and expenditure, and have therefore been excluded from this report.

	Rs.
Actual of 1861-62	7,36,330
Ditto of 1860-61	6,26,850
	Rs. 109,480

611. **Sayer or Extra Revenue.**—The revenue from this source in previous years having been small, the receipts were classed under miscellaneous. Recently, however, several items of revenue hitherto considered as appertaining to land revenue, such as forest revenue, revenue derived from the sale of Amendevi coir, tolls levied at the canal known as "Cochrane's Canal," &c., have been, under instructions from the Auditor General of India, classed under Sayer or Extra Revenue. The actual of 1861-62, amount to 7,36,330 rupees. The receipts for 1860-61 being 6,26,850 rupees, that is 1,09,480 rupees, or 17⅜ per cent. above the actual of 1860-61. The increase is owing principally to the forest operations having been more extensive in 1861-62 than in previous years.

612. **Miscellaneous.**—The receipts from miscellaneous and minor sources are given in the annexed statement. The items are not individually of sufficient importance to require separate notice:

		Rs.
Law and justice, (fees, fines, &c.)		3,31,240
Police (fines, &c.)		32,340
Mint (seignorage and gain on copper coinage)		6,81,320
Marine (port dues and fees)		93,150
Public Works (refunds of charges, rent of buildings, &c.)		3,47,470
Miscellaneous (difference of exchange on transactions with the Home Government, &c.)		6,74,000
Military receipts, sale proceeds of provisions and Commissariat stores	8,68,302	
Ditto - - ditto in the Eastern settlements	1,46,513	
Stoppages from soldiers, &c., on account of diet whilst in hospital	49,654	
Sale proceeds of military stores	1,74,839	
Ditto - - clothing ditto	44,570	
Ditto - - medical ditto	3,190	
Ditto - - horses and cattle	75,439	
Retrenchments.—Table money, &c., recoverable	2,62,143	
Amount recovered by re-sale of huts	61,406	
Abkarry collections	2,16,055	
Miscellaneous receipts	1,00,237	
Recovery of unexpended portion of advances made for State purposes	3,082	
		20,05,430
Interest (Dividends of the Bank of Madras on the Government Shares)		19,500
Total - - - Rs.		41,84,450

Chap. X.
Madras.

613. **Aggregate Revenues and Receipts.**—The total receipts during 1861-62 under the several heads above mentioned, amounted to 6,95,15,820 rupees, being 36,79,420 rupees above the actual of the previous year, or equal to 5 per cent.

614. **Total Territorial Income from 1837-38 to 1861-62.**—The revenues and receipts, or territorial income for the past 25 years, is tabulated in the annexed statement with the per-centage of increase and decrease, as compared in each case with the year preceding:—

		Per-centage of Increase on the One previous Year.	Per-centage of Decrease on the One previous Year.			Per-centage of Increase on the One previous Year.	Per-centage of Decrease on the One previous Year.
	Rs.				Rs.		
1837-38	5,02,25,538	- -	1¼	1850-51	5,24,13,799	1½	—
1838-39	5,12,20,809	2	—	1851-52	5,39,15,001	2¾	—
1839-40	5,97,80,914	16½	—	1852-53	5,48,69,598	1¾	—
1840-41	5,21,89,491	- -	12¾	1853-54	5,09,83,383	- -	7
1841-42	5,21,26,018	- -	-⅛	1854-55	5,11,56,415	-¼	—
1842-43	5,29,34,259	1½	—	1855-56	5,49,66,757	7¼	—
1843-44	5,39,71,608	2	—	1856-57	5,76,70,497	5	—
1844-45	5,22,93,525	- -	3	1857-58	5,66,20,366	- -	2
1845-46	5,31,68,089	1¾	—	1858-59	6,24,58,384	10¼	—
1846-47	5,35,12,884	-¾	—	1859-60	6,53,42,670	4½	—
1847-48	5,38,16,036	-½	—	1860-61	6,62,30,668*	1½	—
1848-49	5,32,18,618	- -	1⅛	1861-62	6,95,15,820	5	—
1849-50	5,16,07,106	- -	3				

	Rs.
* Territorial income for 1860-61	6,58,36,400
Add—Post Office collections taken as territorial income in 1860-61	8,91,616
	6,67,28,016
Deduct—Amount on account of allowances, refunds, and drawbacks shown as deductions from the receipts in 1860-61	4,97,348
Actual of 1860-61, as shown above - Rs.	6,62,30,668

615. **Allowances, Refunds, and Drawback.**—Before the introduction of the budget system, these charges were shown as deductions from receipts. Under the present system they appear separately. The actual charges for 1861-62 amounted to 2,51,240 rupees, being 2,55,020 rupees, or 50¼ per cent. below the actual of 1860-61, viz., 5,06,260 rupees. The decrease is owing to the refund in 1860-61 of mesne profits collected from the restored zemindary of Neddadavole, while in the possession of Government.

	Rs.
Actual of 1860-61	5,06,260
Ditto of 1861-62	2,51,240
	Rs. 2,55,020

616. **Revenue Charges.**—The charges of the Revenue department comprise the cost of the Board of Revenue, the land revenue establishments in the provinces and at the Presidency, the general revenue settlement and survey, the Inam Commission, the forest conservancy, the establishments in the Presidency and provinces for the collection of income tax, stamp and salt duty, and the land and sea customs. The actual for 1861-62 amounted to 64,26,830 rupees, while that for 1860-61 was 74,48,920 rupees. The result is a decrease of 10,22,090 rupees as marginally indicated, or 13¾ per cent. below that of the preceding year. This decrease occurs chiefly in the items entered in the margin,* and is principally owing to the reduction of the revenue establishments consequent on the introduction of the new police, and to a comparatively small quantity of salt having been manufactured in 1861-62.

	Rs.
Actual of 1860-61	74,48,920
Ditto of 1861-62	64,26,830
	Rs. 10,22,090

Decrease below 1860-61:

* Land revenue charges	Rs. 4,99,551
Salt - ditto	7,45,025

The per-centage of charges of 1861–62 on the collections of that year under each source of revenue, is noted in the following table :—

HEADS.	Collections in 1861–62.	Cost of Collections in 1861–62.	Per-centage of Charge to the Collections.
Land Revenue - - - - - -	4,08,19,670	47,09,000	10½
Sayer - - - - - - -	7,36,330		
Abkarry - - - - - - -	33,33,930		
Salt - - - - - - - -	86,52,620	10,89,080	12⅜
Stamps - - - - - - -	31,18,830	1,14,720	3⅝
Income Tax - - - - - -	24,94,920	1,21,940	4
Duty on Arts, Trades, &c. - - -	3,49,500		
Land and Sea Customs - - -	23,79,140	1,59,740	6⅝

	Rs.
Actual of 1860–61 - - -	50,32,080
Ditto of 1861–62 - - -	33,58,480
	Rs. 16,73,600

617. Allowances and Assignments under Treaties and Engagements, including Miscellaneous Payments.—These charges have hitherto been included under general charges, but are this year shown separately with reference to the budget classification. They amounted to 33,58,480 rupees in 1861–62, and 50,32,080 rupees in 1860–61. There is therefore a decrease of 16,73,600 rupees, or 33¼ per cent. below last year's actual. This improvement is attributed to the stipends and extra allowances to the families of the late Hyder Ally Khan and Tippoo Sultan paid in Bengal, having been exhibited in 1861–62 as adjusted charges of the Madras Presidency in the accounts of the Government of India; while in 1860–61 the adjustment of these charges were made in the accounts of this Presidency. In addition to this, the arrears of stipends to his Highness Prince Azeem Jah Bahadoor, were paid to a less extent in 1861–62 than in 1860–61, and the commutation of Tanjore pensions have been restricted under orders of Government.

	Rs.
Actual of 1860–61 - -	3,70,25,150
Ditto of 1861–62 - -	2,98,60,020
	Rs. 71,65,130

618. Military.—The actual expenditure in 1861–62 was 2,98,60,020 rupees, showing a decrease of 71,65,130 rupees or 19¼ per cent. below the actual of 1860–61. This decrease is owing to reductions made in the army, in the commissariat charges, and in the indents for supply of stores from England.

	Rs.
Actual of 1861–62 - - -	70,31,710
Ditto of 1860–61 - - -	66,94,900
	Rs. 3,36,810

619. Public Works.—According to the budget classification, both the ordinary and extraordinary expenditure on account of public works have been taken together in 1861–62, whereas in the previous year they were shown separately. This head comprises the charges on account of repairs and construction of buildings for State purposes, of works of internal improvement and public convenience, and the cost of the permanent establishment of the department. The actual for 1861–62 amounted to 70,31,710 rupees exceeding the actual of 1860–61, viz., 66,94,900 rupees by 3,36,810 rupees, or 5 per cent. This increase is ascribable to the extension of Godavery works, and the construction of cotton roads in certain districts.

	Rs.
Actual of 1860–61 - - -	66,55,480
Ditto of 1861–62 - - -	58,03,770
	Rs. 8,51,710

620. General Charges.—These charges comprise the salaries, establishments, &c. of officers employed in the General, Educational, and Political departments; the pensions granted to superannuated servants in the Civil department, donations and contributions from Government to service funds and other local charitable institutions, and miscellaneous payments. The actual charges for 1861–62 amounted to 58,03,770 rupees, while those for 1860–61 were 66,55,480 rupees, being a decrease of 8,51,710 rupees, or 12¾ per cent. below 1860–61. This is attributed to the recent change in the mode of exhibiting the value of copper received for coinage. It now appears as a cash remittance, whereas, prior to 1st May 1861, it was credited to stores.

	Rs.
Actual of 1860–61 - -	31,57,480
Ditto of 1861–62 - -	31,17,780
	Rs. 39,700

621. Judicial and Magisterial Charges at the Presidency and in the Provinces.—The judicial and magisterial charges at the Presidency have hitherto been shown separately from similar charges incurred in the provinces, but are now exhibited together. The aggregate of these charges in 1861–62 amounted to 31,17,780 rupees, and for the year preceding 31,57,480 rupees, showing a decrease of 39,700 rupees, or 1¼ per cent. This is ascribed to the reduction of revenue establishments, one-fifth of which is debitable to this department.—*Vide* explanation under " Revenue Charges."

	Rs.
Actual of 1861–62 - - -	33,44,440
Ditto of 1860–61 - - -	23,45,050
	Rs. 9,99,390

622. Police.—These charges have hitherto been included under the above head, but are now separately shown in consequence of the almost completed organization of the new police in the provinces. These charges amounted in 1861–62 to 33,44,440 rupees, or 9,99,390 rupees, or 42½ per cent. above the actual of 1860–61, which was 23,45,050 rupees. This arises from the introduction of the new police into almost all the districts of this Presidency.

623. **Marine.**—These charges amounted in 1861-62 to 2,88,190 rupees, or 4,04,550 rupees, or 58¼ per cent. below the actual of 1860-61, which was 6,92,740 rupees. This diminution arises from a smaller quantity of coal having been purchased and received from England in 1861-62 than in 1860-61, in consequence of a large stock having been indented for and received during the preceding year.

	Rs.
Actual of 1860-61 - - -	6,92,740
Ditto of 1861-62 - - -	2,38,190
	Rs. 4,04,550

624.—**Interest on Local Loans.**—These charges, hitherto included under general charges, are estimated in 1861-62 to be 6,62,380 rupees, or 9,39,450 rupees, or 58⅝ per cent. below the actual of 1860-61. This is owing to the compound interest, viz., 10,90,000 rupees, allowed in 1860-61 to the Civil Service Annuity Fund on the deficiency of 10¾ lacs in the unappropriated branch of that fund, from 1846 to 1851.

	Rs.
Actual of 1860-61 - - -	16,01,830
Ditto of 1861-62 - - -	6,62,380
	Rs. 9,39,450

625. **Total Territorial Charges.**—The total territorial charges, or charges proper of the State during 1861-62, under the several heads abovementioned, were 6,01,44,840 rupees, or less than the actual of 1860-61 by 1,10,15,050 rupees, or 15½ per cent.

	Rs.
Actual of 1860-61 - - -	7,11,59,890
Ditto of 1861-62 - - -	6,01,44,840
	Rs. 1,10,15,050

626. **Total Territorial Charges from 1837-38 to 1861-62.**—The territorial charges for the past 25 years are tabulated in the annexed statement with the per-centage of increase and decrease, as compared, in each case, with the year preceding:—

	Rs.	Per-centage of Increase on the One previous Year.	Per-centage of Decrease on the One previous Year.		Rs.	Per-centage of Increase on the One previous Year.	Per-centage of Decrease on the One previous Year.
1837-38 -	4,59,40,578 -	- -	14	1850-51 -	4,87,50,388 -	- -	-½
1838-39 -	4,74,30,024 -	3¼	—	1851-52 -	4,92,84,343 -	1	—
1839-40 -	5,82,34,963 -	22¾	—	1852-53 -	5,06,33,053 -	2¾	—
1840-41 -	5,11,13,359 -	- -	12¼	1853-54 -	5,36,07,601 -	5¾	—
1841-42 -	5,04,08,699 -	- -	1½	1854-55 -	5,66,78,712 -	5¾	—
1842-43 -	5,13,27,381 -	10¾	—	1855-56 -	5,85,69,098 -	3¼	—
1843-44 -	5,17,26,688 -	-¾	—	1856-57 -	5,66,54,248 -	- -	3¼
1844-45 -	5,28,96,849 -	2¼	—	1857-58 -	6,61,01,114 -	16¾	—
1845-46 -	5,42,59,249 -	2½	—	1858-59 -	7,49,72,479 -	13⅜	—
1846-47 -	5,20,20,519 -	- -	4⅛	1859-60 -	8,03,62,006 -	7¼	—
1847-48 -	5,31,43,084 -	2¼	—	1860-61 -	7,19,86,689*-	- -	10½
1848-49 -	5,04,36,208 -	- -	5⅛	1861-62 -	6,01,44,840 -	- -	16½
1849-50 -	4,90,57,543 -	- -	2¾				

	Rs.	Rs.
* Territorial charges for 1860-61 - - - - - - - - - -		7,11,59,890
Deduct,—Amount on account of allowances, refunds, and drawbacks deducted from the receipts in 1860-61. *Vide* page 421 of this report - - -		4,97,348
		7,06,62,542
Add,—Postal charges now taken as Imperial expenditure - -	8,00,213	
Adjustment of postage on official letters and packages ordered to be discontinued - - - - - - - - -	4,05,970	
Civil Service deputation allowance now exhibited under debt account - - - - - - - - - -	1,17,964	
		13,24,147
Actual of 1860-61, as shown above - Rs.		7,19,86,689

627. **Result of the Territorial Receipts and Charges.**—The total actual territorial income for 1861-62 has been shown to be 6,95,15,820 rupees,* and the actual charges 5,74,82,440 rupees, estimated charges, 26,62,400 rupees, or a total of 6,01,44,840 rupees. The total income above expenditure stands therefore at 93,70,980 rupees, or 13½ per cent. Instead of a deficit, as was the case in 1860-61,† and previous years (*vide* Finance Statement accompanying this Report) there is a large surplus as shown above available for Imperial and other purposes.

	Rs.
* Actual - - - -	6,91,48,420
Estimate - - - -	3,67,400
	Rs. 6,95,15,820
Actual income of 1861-62 -	6,95,15,820
Ditto charges of ditto - -	6,01,44,840
Surplus -	Rs. 93,70,980
Actual charges of 1860-61 -	7,19,86,689
Ditto income of ditto - -	6,62,30,668
† Deficit -	Rs. 57,56,021

628. **Statement of Revenues and Charges for 1861–62, showing the Proportions which the Charges of each Department bear to the Aggregate Income.**—The following Statement exhibits in one view the Revenues and Charges of the different Departments of the Administration for the year ended 30th April 1862, the proportion of the Revenues derived from each source, and the proportion which the Charges of each Department bear to the total Income.

STATEMENT.

INCOME.	Total Actual Amount for 1861–62.	Per-Centage, *i.e.*, the Proportion yielded by each separate Source of Revenue.	CHARGE.	Total Actual Amount for 1861–62.	Per-Centage, *i.e.*, Proportion of Income allotted to each Branch of Charge.	
	Rs.	*Rs.*		*Rs.*	*Rs.*	
Land Revenue - - - - -	4,08,19,670	58¾	Allowances, Refunds and Drawback - -	2,51,240	½	
			Revenue Charges.			
Salt Revenue - - - - -	86,52,620	12½	Land Revenue - - - - - -	47,09,000	6¾	A
			Assessed Taxes - - - - - -	1,21,930	¼	
			Customs - - - - - - -	1,59,740	¼	
Tribute - - - - - -	34,46,430	5	Salt - - - - - - - -	10,89,080	1½	
			Stamps - - - - - - -	1,14,720	¼	
			Superannuations - - - - -	1,53,430	¼	
			Miscellaneous - - - - - -	78,360	–	
Abkarry - - - - - -	33,33,930	4¾	Contingencies, Special and Temporary - -	570	–	
			A, Total 64,26,830 rupees, or 9¼ per cent.			
Land and Sea Customs - -	23,79,140	3½	Allowances and assignments under treaties and engagements - - - - - -	30,97,400	4½	B
			Miscellaneous Payments - - - -	2,61,080	½	
			B, Total 33,58,470 rupees, or 5 per cent.			
Moturpha and duty on Arts, Trades, &c. - - - - - -	3,49,500	½	Military - - - - - - -	2,98,60,020	43	
			Public Works - - - - - -	70,31,710	10	
Income Tax - - - - -	24,94,920	3½	*General Charges.*			
			Salaries and Expenses of Public Departments -	25,11,210	3½	
			Education, Science and Art - - - -	5,42,860	¾	C
Stamps - - - - - -	31,18,830	4½	Political Agencies and other Foreign Services -	89,510	–	
			Superannuation and Retired Allowances and Gratuities for Charitable and other purposes -	16,15,000	2¼	
			Miscellaneous - - - - - - -	9,37,330	1½	
Sayer or Extra Revenue - -	7,36,330	1	Civil Contingencies, Special and Temporary -	1,07,860	¼	
			C, Total 58,03,770 rupees, or 8¼ per cent., 21½ lacs of which have been estimated.			
Miscellaneous, *i.e.*, Military, Mint, Public Works, Law and Justice, Marine, Police and Interest—3,67,400 rupees estimated - -	41,84,450	6	Judicial and Magisterial Charges at the Presidency and in the Provinces - - -	31,17,780	4¼	
			Police - - - - - - -	33,44,440	4¾	
			Marine - - - - - - - -	2,88,190	½	
			Interest, 5 lacs estimated - - - -	6,62,380	1	
				6,01,44,840	86	
			Surplus - - - - - - -	93,70,980	13	
Rs.	6,95,15,820	100	*Rs.*	6,95,15,820	100	

The actual cash balance on the 30th April 1862 (exclusive of the cash balances of the treasuries of Hyderabad, and East and West Berars, which were formed into a separate administration from 1st May 1862), amounted to 2,92,87,870 rupees, exceeding the cash balance on the 30th April 1861, viz., 2,18,39,788 rupees* by 74,48,082 rupees.

629. The

	Rs.
* Cash Balance on the 30th April 1861 -	2,11,70,060
Add—Value of Copper which remained on the 1st May 1861, for coinage - - -	4,27,740
Cash Balance of Coorg Treasury - - -	2,41,988
Cash Balance on 30th April 1861 - *Rs.*	2,18,39,788

629. The following statement exhibits in one view the actual cash balance in the several treasuries at the beginning and termination of each official year, for the past five years.

Statement of Actual Balance of Cash.

Years.	Actual Cash Balance at the beginning of the Year.	Actual Cash Balance at the end of the Year	Increase at the end of the Year.	Decrease at the end of the Year.	Per-Centage of Increase and Decrease on the One previous Year.
	Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1857–58 - -	2,83,60,257	2,42,98,867	- -	40,61,390	16¾
1858–59 - -	2,42,98,867	2,52,04,890	9,06,023	- -	3¾
1859–60 - -	2,52,04,890	2,42,46,953	- -	9,57,937	4
1860–61 - -	2,42,46,953	2,18,39,788	- -	24,07,165	11
1861–62 - -	2,18,39,788	2,92,87,870	74,48,082	- -	25½
Total of the five years - -	12,39,50,755	12,48,78,368	83,54,105	74,26,492	
Deduct—Total decrease at the end of the year -			74,26,492		
Net increase - - -			9,27,613		

It will be seen from the note in the margin* that the sum of 33,01,546 rupees included in 2,92,87,870 rupees, the cash balance on the 30th April 1862, is not available for immediate disbursement. This large balance of nearly 293 lacs is scattered over a number of treasuries. In this Presidency there are 19 provincial hoozoor or collectors' head treasuries, to each of which are attached several taluq or subordinate treasuries. The note in the margin† exhibits the amount of cash balance at the Presidency and in the Provinces, also the amount in transit.

	Rs.
* Silver Bullion - - - - - -	7,50,410
Copper coins - - - - - -	11,25,450
Copper for coinage in the Mint - - -	12,99,686
Remittance in transit to other Presidencies now included in the cash balance - - -	1,26,006
	33,01,546
Available for general circulation - - -	2,59,86,324
Rs.	2,92,87,870

	Lacs.
† In the Bank of Madras - - - - -	54¾
,, Mint - - - - - - -	20½
,, Transit - - - - - -	20¾
In the Provincial Treasuries - - - -	197
	Rs. 293

630. The amount of small silver coins sent to the interior in the year under review, is very limited compared with the previous six years; this is ascribable to an unprecedentedly large quantity of these coins having been supplied to the collectors in the previous year 1860–61, which diminished the demand in the year under report. There is, however, an increase of 75,390 rupees in copper coins transmitted to the interior.

Circulation of Small Coins.

—	Amount sent to the Interior.		—	Amount supplied to other Presidencies.	
	Silver.	Copper.		Silver.	Copper.
	Rs.	*Rs.*		*Rs.*	*Rs.*
In 1855-56 - -	4,03,500	84,300	In 1855–56 - -	- -	10,000
,, 1856–57 - -	8,38,300	1,68,450	,, 1856–57 - -	—	—
,, 1857–58 - -	8,19,500	2,60,000	,, 1857–58 - -	1,40,000	2,33,413
,, 1858–59 - -	6,17,000	3,48,600	,, 1858–59 - -	- -	1,06,805
,, 1859–60 - -	4,53,000	2,31,700	,, 1859–60 - -	1,00,000	8,00,000
,, 1860–61 - -	11,11,000	2,61,000	,, 1860–61 - -	- -	5,00,000
,, 1861–62 - -	2,61,000	3,36,390	,, 1861–62 - -	- -	3,00,000
Rs.	45,03,300	16,90,440	*Rs.*	2,40,000	19,50,218

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CIVIL PAYMASTER.

631. The past year, 1861–62, has been one of importance as regards the constitution and working of the Civil Paymaster's Office.

Change of official designation and transfer of Bill and Resource Departments to Civil Paymaster.

632. With the introduction of the Budget system which came into operation on the 1st of May 1861, the duties and responsibility of the Civil Auditor, whose official designation was at the same time changed to that of Civil Paymaster, were very materially increased by the transfer to his control of the Bill and Resource Departments previously under the Accountant General, and by his being required to audit charges not only in accordance with the special orders and rules regulating the same, but also in accordance with the Budget grants.

Change in the division of departmental business and breaking up of "Contingent Department."

633. The division of business into department which obtained under the old system had, in a great measure, to be revised. Formerly, the charges, other than those of the Presidency and Public Works Department, were divided into two branches, "Fixed and Contingent," and were passed in separate departments; but as under the new system charges of both branches were estimated in the Budget under their respective heads of service, it was found necessary to make each auditor supervise the entire charges appertaining to the head of service entrusted to him, so that the department termed "Contingent" was broken up, and the auditors and assistants forming it were incorporated with those of the "Fixed" Department, to assist in the increased work thrown upon the latter.

Re-arrangement of Audit Registers.

634. The Audit Registers which were formerly prepared according to departments, and comprised charges from May to April of each year, were also re-cast, so as to agree in classification with the Budget heads of service, as well as with the year of estimate and account which represents salaries and allowances from April to March, inclusive.

Revision of office establishment.

635. The office establishment was revised, and a fresh scale, amounting to 3,893 rupees per month (including the Bill and Resource Departments), sanctioned by the Government of India at a small increase of cost, 16 rupees per month, over the former scale.

Re-transfer of the Bill and Resource Departments to Deputy Auditor and Accountant-General.

636. On 1st February 1862, the Bill and Resource Departments were re-transferred, with the establishments attached thereto, under instructions from the Government of India to the Deputy Auditor and Accountant General, it having been found upon trial, that that officer possessed better means of checking the estimates and other returns appertaining to those departments than the Civil Paymaster.

Result of the above changes, and general working of the office.

637. The changes referred to in paragraphs 3 and 4 of this report, viz. the incorporation of the Fixed and Contingent Departments, and the alteration in the mode of keeping the Audit Registers, have fully met the exigencies of the department; and on the whole, the result of the first year's working of the Budget system in this office may be considered successful. The general working of the office during the past year was also satisfactory; and much credit is due to the establishment for the willingness and perseverance with which the increased work consequent upon the change of system was undertaken and accomplished.

Statement of increase and decrease of establishment.

638. Appendix VII. is a statement of establishments, permanent and temporary, sanctioned and discontinued during the year.

MILITARY FINANCE DEPARTMENT.

The constitution of the Military Finance Department.

639. In the Report for the year 1860–61, the changes which were taking place in the Military Finance Department were briefly alluded to; they have been carried out in 1861–62, but the time has not yet arrived for the development of their full financial effects.

The department now consists of a—

Controller,
Military Accountant,
Pay Examiner,
Ordnance Examiner,

Commissariat Examiner,
Medical Examiner,
Compiler Pay Department, and
Eight Divisional Paymasters.

State of accounts.

640. Formerly it was the normal state of the Audit Department to be in arrears, but now the arrears have been cleared off, and the account of the different offices are current; within a month of the close of the official year (1861–62) they had all been audited and passed; much, it will thus be seen, has been accomplished, but much remains to be done before the new system can be pronounced to be either complete or perfect.

Changes in the personnel of the department in the year 1861–62.

641. Many changes have taken place in the personnel of the department during the year. It speaks well for the new system that these changes have been effected without retarding its working or impairing its efficiency. The designation of "Military Auditor General" has been altered to "Controller of Military Finance."

Changes in the organization and constitution of the Army in 1861–62.

642. Changes have likewise been made in the organization and constitution of the army during the year, but the time has not yet arrived for showing their full financial effects, although it may not be out of place to indicate briefly some of the more prominent of them.

643. The chief of these changes may be considered the institution of the newly organised staff corps, which has absorbed from the old Indian army—

7 lieutenant-colonels,	163 captains,
90 majors,	81 lieutenants,

at an additional cost to the State, as far as yet ascertained, of 2,28,960 rupees per annum.

Staff corps.

644. Under the amalgamation order, the artillery has been re-organized at an extra charge as regards the pay and allowances of the officers of 35,496 rupees per annum.

Re-organization of the Madras Artillery.

645. The corps of engineers has also been re-organized at an annual additional cost of upwards of a lac of rupees, of which sum, however, about a sixth only is debitable to the military department, as the officers generally are employed on civil duties.

Re-organization of the Madras Engineers.

646. About the middle of the year a troop of Royal Artillery was withdrawn, causing an annual reduction in the military expenditure of the presidency of 1,07,580 rupees.

Withdrawal of a troop of Royal Artillery.

647. During the year a regiment of European infantry (Her Majesty's 43d) was transferred to the Bengal Presidency, causing an annual saving of about 3,15,000 rupees. It has been determined to make a further reduction of one European regiment, which will cause an additional saving of the like amount.

Reduction in the men of European infantry regiments for the Madras Presidency.

648. The numerical strength of regiments (cavalry and infantry) is also under reduction, and when fully carried out, will effect a corresponding financial reduction of *Rs.* 27,92,355. 4.

Reduction in the established strength of regiments, cavalry and infantry.

649. Consequent on the withdrawal of a large body of native troops from Pegu, the departmental establishments there have been considerably diminished, and in the pay department alone there has already been a saving of about 10,000 rupees per annum.

Further reductions in the pay department are under consideration.

Reduction in establishments in the Pegu division, and especially in the Pay Department.

650. The native army has been reduced by eight regiments of infantry, causing a prospective saving in the cost of the effective portion of the army of *Rs.* 7,92,232. 12.

Reductions in the numbers of regiments of native infantry.

651. There has not been time to receive returns of the amount paid in gratuities, or the additional pensions caused by the reduction of these eight regiments, but they will be inconsiderable compared with the saving to the State which will eventually follow.

Amount of bounties, and cost of increased number of pensions.

652. The number of men who volunteered for Her Majesty's service on the amalgamation of the two armies was 4,010, at a cost of 1,65,290 rupees.

Number of men who have volunteered for Her Majesty's service, with amount of bounties.

653. During the year the system of payment by cheque was introduced into the different pay offices; it has worked well except at Hyderabad, where the Civil Treasury is at an inconvenient distance from the military cantonments; cash payments have in consequence been resumed.

Payment by cheques.

654. Formerly the pay proper and the regimental pay and allowances of staff officers, in whatever capacity they were serving, was debited to charges regimental, but as a general rule the pay and allowances of such officers are now debited to the department, civil or military, with which they are serving, and thereby exhibiting the actual cost of each department, and relieving the army of a charge which did not properly belong to it.

Pay proper, and pay and allowances of staff officers.

Another important change has taken place in the course of the year, viz., that when any civil or military department has occasion to employ the services of another department or to indent on it, for stores, or goods of any kind, the department so applying has to provide the funds, and pay for the services of stores; this system was partially in operation during the year 1861-62, but it will have full effect during the current year of 1862-63.

The retirement of 48 lieutenant-colonels, 31 majors, and 16 captains at the end of the year, on a bonus graduated according to standing and rank, relieved the cash requirement for the payment of the army to the amount of *Rs.* 5,32,518. 13. per annum; this decrease has of course caused an increase in the home expenditure for pensions for the time being, but at no distant period the saving will be very considerable.

655. The Budget estimate for 1861-62 was 3,18,60,137 rupees, and this sum will not, as far as has been ascertained, have been exceeded.

Budget estimate for 1861-62.

MINT.

656. The amount of merchants' silver bullion received during the year 1861-62 was 44,64,999 standard tolas, or 51,664 less than during the previous year, and that of uncurrent coin and public bullion, transferred from the general treasury and other public offices, being 2,13,967 standard tolas, or 1,59,417 above the receipts of the former year; the total amount of silver received for coinage during the year was 46,78,966 standard tolas, of which *Rs.* 43,99,068. 14. were coined and remitted. The denominations, numbers, and value of the respective pieces were:—

Silver receipts, 46,78,966 standard tolas.
Value of coins remitted, 43,99,068 rupees.
Receipt of bullion.

	Rs.	*Rs.*
Of single rupees - - - -	39,77,440 - - -	39,77,440
Of half rupees - - - - -	2,65,490 - - -	1,32,745
Of quarter rupees - - - -	4,94,024 - - -	1,23,506
Of double annas - - - -	13,23,023 - - -	1,65,377
Total - - *Rs.*	60,59,977 - - -	43,99,068

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The result of coinage operations favourable, gross excess 197 rupees per lac.

657. The out-turn was very favourable, as the excess of silver delivered above the amount with which the Mint was debited, was 8,655 rupees, or at the rate of 197 rupees per lac, as shown in the following statement of receipts and remittances:—

		Rs.
To balance on hand on the 1st May 1861 - - - -		4,66,127
„ Merchants' silver bullion purchased - - - -		44,64,999
„ Uncurrent coin and public bullion received - - -		2,13,967
		51,45,093
By standard value of coin remitted - -	Rs. 43,99,290	
„ Balance in the Mint - - - - - -	7,54,458	
		51,53,748
Excess - - Rs.		8,655

Copper coinage.

658. The supply of copper slips from England having been very large, the coinage of that metal both from slips and re-melted scissel was steadily maintained; 419 tons of slips and 230 tons of scissel having been worked up.

Total out-turn of coin, both of silver and copper.

659. The total out-turn of coin, both of silver and copper, was 7,70,09,737 pieces, in value 54,76,040 rupees. The average out-turn of pieces per working day was therefore 2,70,000. The numbers of each denomination of coin, and their values, with the rates at which they were coined, are shown below.

			Rs.	a.	p.	Rs.	a.	p.
Single rupees	39,77,440	39,77,440 at trifle above $\frac{7}{8}$ p'cent.	35,336	8	1			
Half ditto	2,65,490	1,32,745 at „ 2 ditto	2,654	14	4			
Quarter ditto	4,94,024	1,23,506 at „ 4 ditto	4,940	3	10			
Double annas	13,23,023	1,65,377$\frac{7}{8}$ at „ 5 ditto	8,268	14	3			
						51,200	8	6
Half annas	141,96,480	4,43,640 at 313 rupees per lac -	44,434	15	8			
Quarter ditto	324,01,920	5,06,280 at 191 ditto ditto -	61,887	10	8			
Single pies	243,51,360	1,26,830 at 119 ditto ditto -	28,978	1	10			
						1,35,300	12	2
					Rs.	1,86,501	4	8

Receipts and disbursements.

660. The receipts of the Mint amounted to 6,74,784 rupees, and the expenses, including the Assay office and other charges, with the loss on the sale of copper scissel, were 2,49,609 rupees. There was therefore a clear profit of 4,25,175 rupees. The particulars are as follows:—

Receipts.	Rs.	a.	p.	Rs.	a.	p.
Seignorage and refining charges on silver bullion -	90,394	8	11			
Gain on copper coin, after deducting value of the copper	5,66,454	13	6			
Excess of silver found in different departments - -	8,655	7	2			
Amount of acids and unserviceable articles sold at the Mint - - - - - - - - -	9,279	3	3			
				6,74,784	–	10
Disbursements.						
Mint master's salary - - - - - - -	18,681	8	–			
Mint establishment, including paper currency Department - - - - - - - - - -	42,043	11	10			
Contingent servants - - - - - - -	58,288	15	9			
Gram, straw purchased, articles, &c. - - - - -	18,430	5	6			
Coal - - - - - - - - - - -	21,000	–	–			
Coke - - - - - - - - - - -	12,404	13	1			
Store articles - - - - - - - - -	26,151	5	9			
Moulder and pattern maker - - - - - -	8,440	–	–			
Total Assay Office Establishment - - - - -	29,418	–	8			
Loss on copper scissel - - - - - - -	14,750	5	1			
				2,49,609	1	8
Net gain as exhibited by the Mint books - - Rs.				4,25,174	15	2

661. The coinage of the past fifteen years is shown below :—

Coinage of fifteen years shown.

Years.	Silver.		Copper.		Total Silver and Copper Pieces.	Total Value.
	Pieces.	Value.	Pieces.	Value.		
1847-48 - -	59,41,157	34,95,300	118,38,828	1,90,946	177,79,985	36,86,246
1848-49 - -	18,51,764	12,96,676	55,66,932	82,460	74,18,696	13,79,136
1849-50 - -	16,42,676	8,64,371	70,93,550	1,05,960	87,36,226	9,70,332
1850-51 - -	39,92,173	19,54,271	77,53,321	1,16,886	117,45,494	20,71,157
1851-52 - -	50,14,308	37,07,032	55,10,710	91,330	105,25,018	37,98,362
1852-53 - -	39,34,975	39,35,171	48,73,850	1,01,610	88,08,825	40,36,781
1853-54 - -	77,61,272	67,51,002	52,86,894	99,502	130,48,166	68,50,504
1854-55 - -	49,96,170	28,68,626	60,68,284	1,27,329	110,64,454	29,95,956
1855-56 - -	82,77,360	54,52,049	67,83,102	1,20,676	150,60,462	55,72,726
1856-57 - -	151,31,526	86,78,139	151,29,884	2,59,435	302,61,410	89,37,575
1857-58 - -	163,38,249	96,21,933	348,95,280	6,50,791	512,33,529	102,72,724
1858-59 - -	67,63,524	48,53,440	305,25,947	5,64,131	372,89,471	54,17,572
1859-60 - -	110,78,847	56,62,073	654,68,832	9,02,991	765,47,679	65,65,064
1860-61 - -	66,18,433	51,34,699	723,50,400	10,22,420	789,68,833	61,57,119
1861-62 - -	60,59,977	43,99,068	709,49,760	10,76,750	770,09,737	54,76,040

662. In the machinery department an excellent 30-horse power non-condensing engine, received from England in September 1861, was set up in the silver laminating room, and has added greatly to the power of the Mint; and two small non-condensing engines of the aggregate power of about 30-horse were purchased on the spot to increase the laminating power of the copper department, and thereby provide the means of working up nearly all the scissel produced in the process of coining from slips, and of preventing the loss usually sustained on its sale.

Machinery department.
One 30-horse power engine received from England, and set up for laminating silver; two others purchased, and set up for laminating copper.

663. The foundry attached to the Mint was fully employed throughout the year, having turned out 149 tons of castings on Government account, and for private parties eight tons of small articles.

Foundry.

DEPARTMENT OF ISSUE OF PAPER CURRENCY.

The operations of this department during the two months that have elapsed since its establishment under Act XIX. of 1861, have been confined to the issuing of notes to the Bank of Madras in exchange for current silver coin, and to the custody of that coin. No applications have as yet been made for the issue of notes at the Mint, and no investments of any part of the cash received in exchange for notes have been authorised by the Government of India.

664. A supply of 1,50,000 notes, representing a value of 164½ lacs of rupees, was received from England, and the issues have consisted of—

Paper currency.

				Rs.
5,000	notes of - -	10 rupees - - - -	in value	50,000
5,000	ditto - -	20 ditto - - - -	„	1,00,000
4,000	ditto - -	50 ditto - - - -	„	2,00,000
4,000	ditto - -	100 ditto - - - -	„	4,00,000
1,500	ditto - -	500 ditto - - - -	„	7,50,000
1,500	ditto - -	1,000 ditto - - - -	„	15,00,000
21,000			*Rs.*	30,00,000

Of the cash received in exchange, 25 lacs have been deposited in the old Treasury strong room within the fort, and five lacs in the vaults of the Mint.

The expenditure of the department has been solely on the salaries of the establishment, and has amounted to *Rs.* 1,381. 8. 3.

POLITICAL.

TRAVANCORE AND COCHIN.

665. The administration reports sent by the Dewans of Travancore and Cochin are for the Malabar year 1036 (1860-61), which closed on the 14th August 1861.

The period embraced by these reports, and that which it will be desirable to notice with a view to bring the history of the administration down to the 30th April 1862 (finance excepted), had both elapsed before the present Resident entered on the duties of his office.

The late Resident, Mr. F. Maltby, who has been compelled by ill-health to resign the appointment of Resident, has submitted a detailed report on the administration of the territories of Travancore and Cochin up to the 30th April 1862.

Satisfactory administration of Travancore and Cochin.

666. The state of things disclosed in this report is most satisfactory and encouraging. It shows that the able and zealous exertions of the Resident have been cordially seconded by the Rajahs and their ministers, and that, with scarcely an exception, the reforms which have so long been called for in the administration of these States are either already accomplished, or are in a fair way of being carried out. The Government of Cochin has been placed upon a satisfactory footing by the appointment of a Dewan, who possesses the confidence both of the Rajah and of the Resident. In both States, important improvements have been introduced in the administration of justice. The salaries of the judges have been increased. In Travancore the proceedings in criminal trials have been shortened and simplified by the amalgamation of the Sessions and Zillah Courts; the penal code of British India and the code of civil procedure have been introduced, and the latter, when the Resident wrote, was about to be declared law in the Cochin State. In both States the respective duties of the Dewan and of the Courts of Appeal in judicial matters have been properly defined, and the position of these Courts has been raised; and in both, the Rajahs have consented to exercise their functions, as the source of justice to their people, by the appointment, from time to time, of a Commission composed of the Dewan and other persons approved by the Resident, who will perform duties very similar to those performed by the Judicial Committee of Her Majesty's Privy Council—the final decisions resting with the Rajah and being issued in his name. The proceedings of these Commissions will be conducted in a public and regular manner, and will supersede that system of arbitrary interference with the decisions of the higher Courts, which has heretofore brought so much discredit on the administration of justice in the two States. Small Cause Courts have been successfully established in Cochin; and speaking of the Courts generally, the Resident states, that, "in promptness of decisions, as well as in the quality of the decisions, and in the public feeling regarding the administration of justice," a marked improvement has taken place.

Tobacco monopoly abolished in Cochin.

667. The tobacco monopoly has been abolished in Cochin. In Travancore the financial condition of the State does not at present admit of this source of revenue being interfered with; but Mr. Maltby expresses his hope, that it will be gradually superseded by the introduction of a sounder fiscal system.

Dress of Shanar women.

668. The question of the dress of the Shanar women has of late been quiescent. Mr. Maltby views it as a political, rather than as a religious question, or one connected with female decency, inasmuch as it is the assumption of a dress similar to that worn by the Soodras, and not the amount of covering worn that is objected to by the latter. The laws and customs of the country recognise the superiority of the Soodras or Nairs, which the Shanars, many of whom are wealthy persons, returned emigrants from Ceylon and Tinnevelly, will not admit. As it is, the law is daily broken by thousands. The state of the country has outgrown it, and it cannot long be maintained. Mr. Maltby, while under present circumstances he deprecates any pressure being put by the British Government on the native state in this matter, has impressed strongly the views entertained by our Government in regard to such questions, both on the Rajah and on his ministers, and has urged that the earliest favourable opportunity be taken for intimating that the Rajah will neither allow his courts to be used for enforcing restrictions upon dress, nor allow private parties to take the law into their own hands.

669. Two important measures have been commenced towards breaking down caste distinctions, viz., the erection of suitable buildings for the Courts in which all castes may be admitted, and the adoption of forms of address adapted to the rank of the Court addressed, and not, as hitherto, to the rank of the person addressing it; and in other ways the Rajah's Government has shown to all parties that it is desirous of affording actual and not only nominal toleration.

Public works.

670. The public works in both States are progressing satisfactorily. The Shoranore Bridge, which is to connect the Madras Railway with the Trichoor Road, is advancing rapidly, and the Tramway Company, it is stated, propose to make a tramway from Shoranore to Trichoor. In Travancore, the Victoria Canal is progressing, the Southern Road has been re-constructed, and the road from Alleppy over the mountains to Madura is being rapidly pushed on. Two coffee estates have been already opened on the hills above Cottayam.

tayam. On the same hills a public garden has been commenced at the expense of the Rajah of Travancore. At Alleppy the lighthouse has been completed, and a short tramway, constructed eighteen months ago at a cost of 12,000 rupees, has already yielded a return of over 7,000 rupees.

The late resident, Mr. F. Maltby.

671. The Government have recorded the high sense they entertain of the services rendered by Mr. Maltby, during the short period for which he held the office of British Resident in Travancore and Cochin, and their regret that failing health has compelled Mr. Maltby to quit a post which he was filling with so much credit to himself and to his Government, and with so much advantage to the two States to which he was accredited. Mr. Maltby's administrative ability and earnestness in the discharge of his duties have long been recognised by the Madras Government, and he has fully supported his former reputation by his services in Travancore and Cochin.

Famine.

672. The present Resident brings prominently to notice that, during a period of great and general distress, amounting in the south to famine, heinous crime does not appear to have increased, though the total number of cases of which the police took cognizance exceeded considerably those exhibited in the returns of the previous year.

By the liberality and praiseworthy exertions of the Travancore Sirkar, much was done to alleviate the sufferings of the people in the famine-stricken districts of the south.

Remission of revenue and expenditure on public works.

673. Whilst Land Revenue to the extent of two and a-half lacs of rupees was remitted, one lac and thousand rupees was expended on public works in that portion of the State. The charitable efforts of the Sirkar were seconded by those of private individuals, and assistance was also received from the Famine Relief Fund Committee.

Suspension of duty on grain exported from British ports.

674. It is gratifying, moreover, to learn that the supply of food was largely augmented by the measures respectively adopted by the British and Travancore Governments, in suspending the levy of duty on grain exported from British ports for consumption in Travancore.

Mortality in the Travandrum gaol.

675. The extraordinary number of deaths in the Trevandrum Gaol from small-pox, will be brought to the notice of the Dewan, with a view to ascertaining whether vaccination cannot be made compulsory on the admission of a prisoner, if it is not so already.

Revenue customs, &c. Travancore.

676. The abolition of the monopoly of pepper, and the substitution of an excise on that article, is worthy of notice.

The quantity of pepper on which duty has been levied, together with that sold on account of the Sirkar during that portion of the year over which the monopoly extended, seems to indicate that the excise was readily collected.

The reduction of taxation will prove not only of great and immediate advantage to the ryot, but the stimulus given to the cultivation of pepper by the relief afforded, will, it is hoped, gradually restore to the State the income now given up for the benefit of the people.

The labour of the Commission on the Tariff, alluded to in the last report, has resulted in a revision which in many respects assimilates values to those of the British Indian Tariff, whilst the change is likely to increase the revenues of the State.

Education.

677. Educational measures have received careful attention.

The number of students in the Free School of his Highness the Rajah at Trevandrum has increased very considerably.

The study of the vernacular, hitherto neglected, has been encouraged; and a class has been formed for training youths for service in the department of public works.

To the beneficial effects of the spread of knowledge in this highly-favoured kingdom, as respects the number and attainments of those through whom the blessings of education are becoming known to the people, the Dewan bears valuable testimony, when pointing to the increased powers of discerning between right and wrong which they exhibit.

Finance.

678. As regards Travancore, the financial results of a year altogether exceptional in character, cannot of course contrast advantageously with those of the preceding year, when the latter was the most favourable on record. No ordinary difficulties, moreover, have been met and overcome; and, notwithstanding diminished revenue from causes beyond human control, and heavy demands of a nature not ordinary, though unavoidable, the outlay on public works has been large, and the present financial position of the State will compare favourably with any former period, that immediately preceding it excepted.

TRAVANCORE:		
		Rs.
Total Revenue -	1859-60 -	51,41,918
	1860-61 -	41,05,778
Disbursements -	1860-61 -	46,41,242

679. In Cochin, the results of the year under report have been in every respect highly satisfactory. Permanent sources of revenue exhibit great improvement, and notwithstanding a larger outlay on public works, and the grant of more adequate salaries to the servants of the State, a far larger cash balance is carried forward to the next year's accounts than that exhibited at the close of the preceding year.

COCHIN:		
		Rs.
Total Revenue -	1859-60 -	9,26,945
	1860-61 -	10,40,207
Disbursements -	1860-61 -	8,81,167

More detailed information will be found in the reports of the Dewans of Travancore and Cochin, which are published in the Appendix.

TANJORE.

680. In last year's report it was shown that the Commission appointed for the investigation and settlement of the claims against the late Rajah of Tanjore had completed its inquiries. The amount awarded was 1,86,332 rupees, of which 1,41,122 rupees were awarded by the Commissioner, and 45,210 rupees were added by Government.

The smaller claims under this award were paid by the Commissioner. The heavier claims, amounting to 1,52,336 rupees were referred for the sanction of the Government of India.

Several other questions connected with the affairs of the Tanjore Raj remained unsettled at the close of last year, being then under the consideration of the Government of India.

These questions have been decided, and it has been resolved that all the landed property of the late Rajah, not being a portion of the hereditary Raj, or their value, shall be made over to the family of the Rajah, in accordance with the provisions of the Hindu law; of the personal property the sum which was in the treasury at the time of the Rajah's death, is made available for the payment of the Rajah's debts. The remaining personal property, not State property, is to be made over to the Rajah's family. The payment of the remainder of the Rajah's debts, and the pensions to the various members of his family and dependents, allotted by the Madras Government, were also sanctioned by the Government of India. It was also decided that a sum of 35,000 rupees which had been advanced for the marriage of the Rajah's daughter, should not be reclaimed.

These orders are being carried out.

CARNATIC.

Prince Azeem Jah Bahadoor's claim on the Musnud finally rejected.

681. There is nothing of importance to report in connexion with the affairs of the late Nabob of the Carnatic and the Carnatic stipendiaries, except the reception of an answer by the Secretary of State for India in reply to Prince Azeem Jah's memorial, informing him that his claim to the Musnud of the Carnatic has been finally rejected.

Notice was given on the 15th January 1862, that no claims against the estate of the late Nabob of the Carnatic would be received after 15th March 1862. Prior to this date, 2,310 petitions were received. The claims therein contained are under investigation.

Number of stipendiaries.

682. The total number of stipendiaries of the classes 1801 and 1855 in Madras on 1st May 1862, was 1,904, and at out-stations 330.

Amount of stipends.

683. The actual payments made in Madras for the stipends, &c. of 1801 and 1855, including jaghiredars, during the last official year, were 7,88,975 rupees.

Number of lapses.

684. The lapses of stipends by death were 90, amounting to 12,442 rupees per annum, and the lapses by commutation were 133, amounting to 3,001 rupees per annum.

POODOOCOTTAH.

The affairs of the Poodoocottah State continue to be administered by the Sirkele, under the supervision of the political agent.

Revenue Expenditure.

685. The season of 1860–61, the last that was reported on, though generally healthy, was unfavourable for cultivation. The revenue from land and extra sources, &c., amounted to 2,71,200 rupees, and showed a decrease below that of the preceding year of 20,264 rupees, which was owing mainly to a falling off in the cultivation. The total actual receipts, inclusive of the balance brought forward from the previous year, amounted to 7,47,868 rupees, and the disbursements for the year to 5,34,195 rupees, leaving a surplus in excess of expenditure of 2,13,673 rupees.

Conduct of the Rajah.

686. The Rajah continues to indulge in his former habits of extravagance which necessitated the interference of Government in his affairs; though it does not appear he has contracted any fresh debts, he is reported to have drawn and appropriated to his own use the sum of 81,000 rupees from the devastanum or pagoda funds, which with an increase of 28,000 rupees made to his allowance, and the expenses incurred for the preparations required for the Rajah's pilgrimage to Ramisswaram and Palney, made an aggregate expenditure in the course of the year of 1,56,947 rupees in excess of the schedule that was sanctioned for him in 1854.

The Government have directed the political agent to express to the Rajah the great displeasure with which they have received intelligence of the mis-appropriation of a public fund held in trust by him as the head of the State. The Dewan has been prohibited from making any payment from this fund beyond the usual expenditure, without the sanction of the political agent.

The Rajah has again objected to the substitution of the procedure laid down in Act VIII. of 1859, for the antiquated and cumbrous forms now in use. The political agent has been directed to submit a special report on this subject.

687. WORKING OF THE CIVIL COURTS.—The working of the Civil Courts exhibits little or no improvement. The average number of suits decreed on merits by the Civil Court was 12 per mensem as in last year, by the sub-Court 59 against 55, and by Court of Small Causes 41 against 39. The Rajah disposed of only 35 cases on his appeal file in the course of the year, or an average of three per mensem, and there was a balance of 44 cases awaiting disposal at the end of August 1861. Of 56 criminal cases, in which 71 persons were concerned, there were disposed of by the Criminal Court from August 1860 to July 1861, 54 cases, consisting of 67 persons, and there remained only 2 cases undecided.

MILITARY.

Amalgamation of Her Majesty's British and Indian forces.

688. The event of the year has been the amalgamation of Her Majesty's British and Indian forces, the order for which was republished by the Madras Government in the last day of the official year, 1860-61, viz., 30th April.

European troops for general service.

689. In the European portion of the forces of this Presidency, out of an aggregate strength of 4,716 men (including warrant and staff non-commissioned officers), 4,122 have volunteered for general service.

Officers for general service.

690. The volunteering for general service on the part of the officers has been to a very limited extent. In the three European Regiments it was as follows:—

	1st Madras Fusiliers.	2d European L. I.	3d European Regiment.
Colonels	—	—	—
Lieutenant-Colonels	1	—	—
Majors	1	—	1
Captains	7	5	6
Lieutenants	19	11	11
Ensigns	3	4	—

In addition to the above, the following number of officers of the Native Army volunteered for general service:—

	Cavalry.	Infantry.
Colonels	—	1
Lieutenant-Colonels	—	—
Majors	—	3
Captains	7	3
Lieutenants	20	32
Cornets or Ensigns	1	72

Staff corps.

691. The formation of the "Madras Staff Corps" is one of the leading features in the amalgamation scheme. The applicants for admission to this corps have been numerous, and it consists now of—

7	Lieutenant-Colonels.
98	Majors.
184	Captains, and
93	Lieutenants.
TOTAL - - - 382	

admitted from the date of its organization, viz., 18th February 1861.

Transfer of officers to Her Majesty's line regiments.

692. In connexion with the amalgamation of Her Majesty's British and Indian Forces, and the formation of the "Staff Corps," Her Majesty's Government has granted to officers of the Indian Armies the privilege of transfer to Her Majesty's Line Regiments, on the occurrence of vacancies occasioned by officers of those regiments joining the Staff Corps. As yet there has been no practical result from this boon.

Artillery.

693. The amalgamation of the Royal and Indian Artilleries, and the formation of the new brigades of Royal Artillery, has led to the reduction of the old 4th and 5th Battalions of the Madras Artillery. The remaining native troops of the old Horse Brigade are attached to the new 3d Royal Horse Brigade, four of the companies of the late 5th (Golundauze) Battalion are attached to the 20th and 23d Brigades, and the Battery of Madras Artillery to the 17th Brigade. The other companies of the Golundauze Battalion have been absorbed in the still existing four companies.

European force.

694. The future strength of the European force for the Madras Presidency has been fixed at—

29 Batteries of Artillery.
2 Regiments of Cavalry, and
10 Regiments of Infantry.

Reductions.

695. As in the preceding official year, so in the one under report, there have been considerable reductions ordered in the Native portion of the Army.

Infantry.

696. The last Administration Report showed that the revised organizations of the regiments of Native Infantry has been so far carried out, that the effective strength had been reduced from 48,543 combatants to 39,216 on the 1st May 1861, leaving only 2,140 in excess of the establishment.

In the year under review, this branch of the army has been reduced by eight regiments, viz., from the 45th to 52d inclusive. Seven of these corps were finally broken up from the 31st March 1862. The 52d Regiment having lately returned from Burmah, orders have been issued for its being broken up from 31st May. The total strength of the Infantry by the latest returns is 33,244, which is 1,872 above the establishment.

Sappers.

697. Consequent on the withdrawal of two companies of Sappers and Miners from Pegu, this regiment has been ordered to be reduced to that extent. The measure has been partially carried out, but the question is again under consideration.

Corps of Guides.

698. Owing to the altered circumstances of the Madras Army, the Corps of Guides has been reduced from 18 to 12 privates.

Pegu Sapper Battalion.

699. The only remaining reduction in the Native Army to be noticed, is that of the Pegu Sapper Battalion, which corps is to be allowed to die out; all recruiting for it has accordingly ceased.

Reduction of officers.

700. An important point to be noticed in this report is, the measure adopted by the Home Government to induce a number of the old officers of the Indian Army (Cavalry and Infantry) to retire from the service, offering them annuities according to their regimental rank, varying from 550 *l.* to 150 *l.* in the grades of Lieutenant-Colonel and Major, and 120 *l.* to Captains of 25 years' service.

This offer was taken advantage of, in this Presidency, by—

	Cavalry.	Infantry.
Lieutenant-Colonels	7	41
Majors	6	25
Captains	3	13

Ordnance, Commissariat, and other establishments.

701. Consequent on the withdrawal from Pegu of a considerable portion of the Madras troops serving in that division, and the decrease in the Native Army of the Madras Presidency, extensive reductions have been, and are also in process of being, effected in the expenditure of the Ordnance, Commissariat, public cattle, and other establishments. With a view to further measures of economy, a committee has been appointed to inquire into the state and working of the office and executive establishments of the Commissariat department generally in the Madras Presidency, the Eastern Settlements, and Pegu, and to suggest such reforms of the system as will admit of the work being performed by smaller establishments.

Abolition of brigade majorships at Rangoon and Tonghoo.

702. By the reductions in the military force in the Pegu Division, the appointments of Brigade Major at Rangoon and Tonghoo were abolished from 31st December 1861.

Abolition of the office of Deputy Quartermaster General, Her Majesty's British troops.

703. In the year under notice, the office of Deputy Quartermaster General of Her Majesty's British troops was abolished, and the duties were transferred to the Quartermaster General of the Army.

Sale of surplus horses.

704. The last annual report exhibited a large saving of expenditure effected by the sale of all horses at the Remount Depôt, surplus to the estimated requirements of the service. The more recent reduction, under the orders of the Government of India, in the proportion of horses required to be maintained in mounted corps, has led to the disposal of a still further number of horses; and with the object of inducing, if possible, a more ready sale for them, it was ruled by this Government that all serviceable horses surplus to the reduced establishments, and not likely to be required to replace unfits in other branches of the service, should be sold without being branded, they not having been cast, but being fresh surplus horses. Further, in consideration of the large number of horses still remaining at the Remount Depôt, Government, as a special and temporary arrangement, allowed officers to select any they might require at the usual rates.* Under this order, the number of horses sold was 316,† and the aggregate amount realised, 55,968 rupees.

Introduction of gas-lights in Fort Saint George.

705. Prior to the year 1861-62, Government accorded their support to an experiment for lighting the buildings in Fort Saint George with gas, instead of oil lamps. The undertaking was entrusted to the management of Surgeon Major J. E. Mayer, Professor of Chemistry, and the works required for the purpose having been accordingly erected, the trial was first made in the lower portion of the European barracks in the Fort. The success and economy of the measure induced the Government, early in 1861, to sanction its extension to the upper story of the barracks, coal gas being employed as the cheapest agent, and it has been ultimately determined to light the church, the regimental mess house, and other buildings in the Fort, in the same manner.

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* Cavalry chargers, 700 rupees each. Battery horses, 575 rupees each.

† 15 fresh horses. 10 worn-out stallions. 291 horses belonging to mounted corps.

While it is admitted that the illuminating power of gas-lights will be largely increased, as compared with oil lamps, the estimated expense of the two modes of lighting, as specified below, shows that a considerable saving will be eventually effected by the change.

Cost of each description of Light per Month.

	Rs.	*a.*	*p.*
1 oil lamp	3	8	–
1 oil gas lamp	2	–	–
1 coal gas lamp	1	–	–

It being calculated that 400 lights will be burned nightly in the Fort, the cost will then be annually—

		Rs.
For oil lamps	400 × 3½ × 12 =	16,800
„ oil gas lamps	400 × 2 × 12 =	9,600
„ coal gas lamps	400 × 1 × 12 =	4,800

Thus, for the above number of lights, coal gas would be cheaper than oil gas, by 4,800 rupees, and than oil lamps by 12,000 rupees a year.

Taking the cost of machinery and fittings, together with the remuneration for the charge and management of the works, as a set-off, still it is calculated that a considerable margin will be left, as an annual saving to Government.

Preparation of ale and porter from grainstone.

706. In September 1861, a proposition was submitted to Government by Colonel G. Briggs, of the Artillery, for the preparation, under his superintendence, of ale and porter from (Zeilithon) grainstone, for supply to the European soldiery, instead of the present system of importing malt liquor in casks.

The anticipated advantages were stated to be—

1st. Considerable reduction in freight.

2d. Enormous diminution of expense in land carriage.

3d. Almost entire prevention of leakage, wastage, ullage, &c.

A trial, which had been conducted by Colonel Briggs, for producing malt liquor in the manner above stated, appeared to have been attended with favourable results, though carried out under unfavourable circumstances.

Considering it highly desirable that an experiment promising to afford such material relief to the public finances should be carefully and thoroughly tested, Government authorised Colonel Briggs to purchase, and to convert into malt liquor, a supply of grainstone, and sanctioned an outlay for the necessary apparatus and a moderate establishment.

The liquor, when ready, is to be sold in regimental canteens, with a view to its quality being fairly tested and reported upon.

Bread-making machines.

707. Considering it very desirable to introduce an improvement in the method of kneading dough for the manufacture of bread for the use of the European soldiery at the several stations of the army, Government arranged for the provision from England, in the first instance, of three of Stevens' patent bread-making machines, for trial at Madras, Bangalore, and Secunderabad, respectively, the machine being reported to have come into general use in England.

Workshops in British regiments.

708. As a means of providing amusement and employment to the European soldiery, and promoting their health and morals, a scheme by his Excellency the Commander in Chief in India, for the establishment of workshops in European regiments, where the men could follow and be taught the several trades, has been extended to the Madras Presidency. Measures are in progress for providing the required buildings at the several stations.

Recreation rooms for soldiers in Fort Saint George.

709. At the suggestion of his Excellency the Commander in Chief, arrangements have been recently sanctioned for making over to the Military Department, the building in Fort Saint George, known as the General Treasury, which, from its contiguity to the European barracks, and the nature of its accommodation, seemed well suited for schools, workshops, reading-rooms, rooms for games, &c., for all of which the available accommodation in the barracks was insufficient. Estimates of the cost of the alterations required to adapt the building to the objects named, have been submitted, and the work is in progress.

Money payments in lieu of quarters to married European soldiers.

710. In order to place married soldiers entitled to public accommodation, but living in their own or hired houses, on an equal footing with the rest of the army in respect to quarters, this Government obtained the assent of the Government of India to grant, under certain restrictions, an allowance in lieu of quarters, to married men so situated.

Payment of military pensioners by civil authorities.

711. In 1860, a change in the system of paying military pensions and family certificates in the southern districts of the Madras Presidency was introduced experimentally, by transferring the duties to the civil authorities; the withdrawal of military detachments in those districts having offered a favourable opportunity for giving the arrangement a trial.

Madras, Bangalore, Secunderabad, Jaulnah, Kamptee, and other places beyond the frontier.

The result at stations where the pensioners are numerous, has not proved successful, and it has been found necessary to revert to the former system, by which a military officer was appointed for this duty.

Introduction of machinery in the gun carriage manufactory.

712. With a view to add to the efficient working of the gun carriage manufactory at Madras by the aid of mechanical appliances, a steam-hammer, by Nasmyth, obtained from England, has been set up, and brought into operation in that establishment.

Machinery for the gunpowder manufactory.

713. It being considered by the Right Honourable the Secretary of State of the highest importance that gunpowder in India should be produced equal to that manufactured at the Waltham Abbey and Faversham Mills, and suitable to the improved weapons now in use, arrangements were made to procure from England the necessary incorporating mills worked by steam-engines, and constructed with all the recent improvements, together with working plans and drawings of the requisite buildings and machinery for effecting the above object. The machinery is in course of supply, and the necessary preparations are being made for its reception.

Conversion of a 32-pounder into a breech-loading rifled gun.

714. In order to test the feasibility of effectually converting smooth-bore cast-iron guns into rifled ordnance, Lieutenant Colonel T. H. Campbell, of the Artillery, tried the experiment with a 32-pounder, which he eventually converted into a breech-loading rifled gun, upon a principle of construction suggested by himself, aided in the practical execution of his project by the mechanical skill of Supervisor Lee, of the Grand Arsenal. The success of Colonel Campbell's experiment has been pronounced to be highly creditable to that officer; but doubts have been entertained with regard to the safety and endurance generally of the ordinary cast-iron guns converted into breech-loaders.

EDUCATIONAL.

715. The number of schools connected with the Department of Public Instruction during the year under review was 733, with an attendance of 29,194 pupils. The corresponding numbers shown in the last Report were, 575 and 24,240. The increase is chiefly under the head of private schools, the whole of the schools supported by the Gospel Society having been thrown open to inspection during the year under review, and the number of inspected village schools in the Coimbatore District having risen from 13 to 67.

The following Tables show the distribution of the Schools in the several Districts :—

1st. With reference to the agency by which they are managed.

Name of District.	Government Colleges and Schools.	Pupils.	Schools supported by a Rate under Government Management.	Pupils.	Private Colleges and Schools which are in the Receipt of, or have received, Grants-in-Aid.					Private Schools under Inspection, which have not received Grants.	Pupils.	Total Colleges and Schools.	Total Pupils.	Division.	Total Pupils.
					Established by Missionary Societies.	Established by Natives.	Established by Europeans and Natives combined.	Others.	Pupils.						
Ganjam - -	26	910	–	–	–	–	–	1	83	2	27	29	1,020	First -	4,400
Vizagapatam -	7	236	–	–	–	4	–	–	160	1	87	12	483		
Godavery -	13	658	99	1,705	1	–	1	–	75	–	–	114	2,438		
Kistna - -	2	28	–	–	2	1	–	–	397	1	34	6	459		
Bellary - -	4	403	–	–	4	–	–	–	243	–	–	8	646	Second -	1,521
Kurnool - -	1	129	–	–	–	–	–	–	–	–	–	1	129		
Cuddapah -	1	84	–	–	23	–	–	–	445	–	–	24	529		
Nellore - -	17	63	–	–	2	–	1	–	154	–	–	10	217		
North Arcot -	10	1,533	–	–	–	–	–	2	70	–	–	12	1,603	Third -	7,505
Madras - -	16	1,869	–	–	31	5	–	6	4,033	–	–	58	5,902		
South Arcot -	9	566	–	–	1	–	–	–	92	–	–	10	658	Fourth -	2,947
Salem - -	5	391	–	–	–	–	–	–	–	–	–	5	391		
Tanjore - -	8	536	–	–	54	–	–	–	1,362	–	–	62	1,898		
Coimbatore -	7	317	–	–	12	19	1	–	630	36	605	75	1,552	Fifth -	11,499
Trichinopoly -	2	212	–	–	15	–	–	–	363	–	–	17	575		
Madura - -	4	381	–	–	3	1	–	–	178	–	–	8	559		
Tinnevelly -	–	–	–	–	260	1	1	–	8,813	–	–	262	8,813		
South Canara -	4	104	–	–	6	–	–	2	335	–	–	10	439	Malabar and Canara -	1,392
Malabar - -	7	553	–	–	1	–	–	–	330	–	–	10	883		
Total - -	143	8,973	99	1,705	415	31	4	11	17,763	40	753	733	29,194		

Note.—The village schools supported by the Gospel Society have been thrown open to inspection during the year under review.

2d. With reference to the standard of Instruction.

Name of District.	Number of Schools in which the standard of Instruction is higher than that in a Taluq School.	Number of Pupils.	Number of Schools of the grade of Taluq Schools.	Number of Pupils.	Number of Village Schools.	Number of Pupils.	Number of special or professional Institutions.	Number of Pupils.	Total number of Schools.	Total number of Pupils.
Ganjam - -	3	254	6	148	20	618	–	–	29	1,020
Vizagapatam -	3	210	6	220	3	53	–	–	12	483
Godavery -	4	321	12	507	98	1,610	–	–	114	2,438
Kistna - -	2	342	4	117	–	–	–	–	6	459
Bellary - -	5	550	3	96	–	–	–	–	8	646
Kurnool - -	1	129	–	–	–	–	–	–	1	129
Cuddapah -	1	84	–	–	23	445	–	–	24	529
Nellore - -	1	90	1	20	8	107	–	–	10	217
North Arcot - -	3	580	5	364	4	659	–	–	12	1,603
Madras - -	15	3,274	14	860	25	1,230	4	538	58	5,902
South Arcot -	1	197	8	369	1	92	–	–	10	658
Salem - -	1	185	4	206	–	–	–	–	5	391
Tanjore - -	8	902	6	241	48	755	–	–	62	1,898
Coimbatore -		124	8	352	66	1,0 6	–	–	75	1,552
Trichinopoly -	1	138	4	156	12	281	–	–	17	575
Madura - -	2	290	4	186	2	83	–	–	8	559
Tinnevelly -	6	696	34	1,117	222	7,000	–	–	262	8,813
South Canara -	1	93	5	245	4	101	–	–	10	439
Malabar - -	6	723	4	160	–	–	–	–	10	883
Total -	65	9,182	128	5,364	536	14,110	4	538	733	29,194

Of the 29,194 pupils entered in the foregoing tables,

306	were Europeans.
1,166	,, East Indians.
5,827	,, Native Christians.
15,907 *	,, Hindoos.
923	,, Mahomedans.

Of the entire number, 4,132 were girls, of whom

58	were Europeans.
151	,, East Indians.
2,917	,, Native Christians.
973	,, Hindus.
33	,, Mahomedans.

716. Madras University.—The University held three examinations in February last, one for Matriculation, one for the degree of Bachelor of Arts, and one for the degree of Bachelor of Laws.

The result of the Matriculation examination showed a great improvement over previous years. The number of candidates who presented themselves (195) was more than double the number (80) examined in 1861, and the number passed (82) was nearly double the number (48) passed in that year. This satisfactory result is no doubt attributable in some measure to the alteration which has lately been made in the rules for the examination of candidates for the Uncovenanted Civil Service, and which prevents the two systems of examination clashing, as they unquestionably did in former years; but it may also be fairly

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[*] Exclusive of 5,065 pupils attending the Gospel Society's village schools, who could not be arranged under the classes specified, the necessary information not being at hand.

fairly inferred from this large increase in the number of passed candidates, that the standard of school education throughout the Presidency is gradually rising, although stil considerably below what may reasonably be hoped for, a few years hence. The Examiners stated in their Report that they considered the attainments of the most advanced students of the present year to be higher than those who acquitted themselves best in former years. The only subject which was brought up by a large number of candidates in a discreditable manner was Geography. In this branch of the examination, the papers generally indicated a very superficial and inaccurate knowledge. The passed candidates came from the following institutions:—

NAME OF INSTITUTION.	Rank in	
	1st Class.	2d Class.
Presidency College	3	15
Doveton College	–	1
Civil Engineering College	–	2
Government Normal School, Madras	4	9
Provincial School, Calicut	–	1
do. Combaconum	–	9
do. Bellary	–	3
Zillah School, Chittoor	–	2
do. Cuddalore	1	–
do. Rajahmundry	–	1
Pachaiyappa's Central Institution, Madras	2	7
Wesleyan Mission School, Madras	–	2
Mission Seminary, Sullivan's Garden	2	2
St. Mary's Seminary, Madras	–	1
Cotgrave Seminary, Madras	–	1
Bishop Corrie's Grammar School, Madras	–	2
Ootacamund Grammar School	–	3
Tuticorin Subscription School	–	1
Jaffna Institution	1	–
Church Mission School, Cottayam	–	1
Gospel Society's School, Negapatam	–	1
King William's College, Isle of Man	–	1
Private Tuition	–	3
Not known	–	1
Total	13	69

Ten scholarships of 10 rupees per mensem, each tenable for three years, which had been offered by the Director of Public Instruction with the sanction of the Senate, were awarded on the result of this examination.

717. B. A. Examination.—Only six candidates offered themselves for the B. A. examination, all students of the Presidency College. Of these only five candidates passed, all in the second class.

718. B. L. Examination.—Five candidates were examined for the degree of Bachelor of Laws, of whom three passed, two of them private students, and the third a student of the Presidency College; another student of the Presidency College, Law Class, who had previously satisfied the requirements of the B. L. examination, was admitted to the degree on passing the Matriculation examination in February last.

In the course of the year the regulations regarding the examinations in the faculties of law and civil engineering were carefully revised. The alterations made in the scheme of examination prescribed for the Law degrees were made rather with the view of more clearly defining, than of changing the course of examination previously prescribed. The examination for the B. L. degree, as now arranged, includes the Law of Evidence, (Norton) the Law of Contracts and Torts, Equity Jurisprudence, as treated in "Smith's Manual," the principles of Hindu and Mahomedan Law, the Indian Penal Code, and the Codes of Civil and Criminal Procedure recently enacted. A candidate for the degree of Master of Law is to be examined in the entire course prescribed for the B. L. degree, adding "Best's Principles of the Law of Evidence," and substituting "Story's Commentaries" for "Smith's Manual" and "Chitty on Contracts," and "Addison on Torts" for "Broom's Commentaries." He is further to be examined—

(*a.*) In Mercantile Law (Smith's Compendium), (*b*) in the Law of Real and Personal property (Josiah Williams), and in any three of the following subjects at his option:—

1. Constitutional Law (Hallam).
2. Public International Law (Wheaton).
3. Private International Law (Story's Conflict).
4. Roman Civil Law (Leapingwell).
5. Legal Maxims (Broom).

In the faculty of civil engineering, the new regulations, like the old, provide for only one degree; that of Bachelor of Civil Engineering. The subjects prescribed are noted in the margin. Every candidate is required to pass in the first three branches, and then he may elect between the subjects which belong to constructive and those which belong to mechanical engineering.

I. Mathematics.
II. Natural Philosophy.
III. Mensuration & Estimate making.
IV. Surveying and Levelling.
V. Constructive Engineering.
VI. Architectural and Topographical Drawing.
VII. Mechanical Engineering.
VIII. Machine Drawing.

Much care has been bestowed upon the revision of these regulations, and there is every reason to hope that the examinations will be of much benefit in directing the studies of candidates for the important professions with which these faculties are connected.

Reverting to the faculty of Arts, it should be mentioned that the plan of ranking the passed candidates at the Matriculation examination, and for the degree of B. A., in the order of proficiency, and not alphabetically, has been adopted by the Senate.

719. PRESIDENCY COLLEGE.—A step in advance was taken in February last towards placing the Presidency College upon the footing which it is intended eventually to hold. This institution has been hitherto, and still is, a collegiate school rather than a college; the senior department forming what might be termed the college proper, and the junior being in fact a school. The number of students qualified for admission into the senior department, and indeed into the higher classes of the junior department, has hitherto, of necessity, been very limited. Of late, however, the number of qualified candidates both for the senior department and for the higher classes of the junior department has somewhat increased, and, after the entrance examination, in January last, it was found necessary either to form an additional division of the third and fourth classes of the junior department, or to exclude some 56 well-qualified candidates, 13 of whom had come from the provinces, from a greater or less distance, with the express view of entering the college. Under these circumstances it was determined to abolish the four divisions forming the first and second classes, leaving it to the pupils who belonged to them to enter the Practising or Model School at the Normal School, or any other institution they might select. The change has reduced the number of students in the college, exclusive of the law class, from 300 to 187, but it is unquestionably a step in the right direction; and as the standard of instruction advances in other schools, the remaining classes of the junior department will be abolished in succession.

The fifth class is the highest.

The results of the annual examination of the students in their English studies were generally favourable. In vernacular literature the papers were not well done, but the students generally acquitted themselves well in translation, and the *vivâ voce* examination was decidedly successful. In the law class two courses of lectures were delivered, one on Hindu and Mahomedan Law, and the other on Equity and Procedure. The students failed generally in equity, but in the other subjects the answering was good.

720. GOVERNMENT NORMAL SCHOOL.—The progress of the Government Normal School at Madras during the past year, as well as during the preceding year, has not been quite so satisfactory as it was at first. This is no doubt in a great degree attributable to the numerous openings in other departments and professions which are more popular as well as more profitable in a pecuniary point of view, than that of a teacher. The principal and his assistants have much to contend against in the imperfect attainments of the students on admission, and those who have lately passed out of the school appear to have been below the average of their predecessors. The institution, however, now contains some very promising students. At the examination held in June 1861, ten trained students obtained certificates, ranging from the fourth to the sixth grade, and ten others passed at the Matriculation examination in February. The number of students now under training in this school is 75, including 13 European military students, who are being prepared for the situation of Army schoolmasters. Five students of this class passed their examination and were sent out to schools in the course of the year. The Normal School is about to be transferred to a commodious building on the Mount Road, which has lately been purchased for it by Government.

721. NORMAL SCHOOL AT VELLORE.—The Normal School at Vellore has been very efficiently conducted. The head master, a Native, is a passed student of the Madras Normal School. The Inspector makes favourable mention of a plan which had been adopted by him, of requiring each student to enter in a note-book, notes of the master's criticisms on each of what are called the criticism lessons, by which means they accumulate a fund of information on the faults most common, and on the proper methods of teaching the various subjects of school instruction. Five students from this school obtained certificates; one of the seventh and four of the eighth grade, and were appointed to masterships. Twenty-four students are now under training. The Practising School, at the close of the year, contained 206 pupils; a reading-room has been established in connexion with the school, which is resorted to by the Normal students, by the senior pupils in the Practising School, and by some of the inhabitants of the town.

722. NORMAL SCHOOL, MAYAVERAM.—The Normal School at Mayaveram has been lately transferred to Trichinopoly. The move, it appears, was distasteful to the master and to some of the Normal students, and for some time the attendance was very irregular, and the progress of the school very unsatisfactory. The head master has since been removed. The number of students under training is 26.

723. NORMAL SCHOOLS AT VIZAGAPATAM AND CANNANORE.—Two new Normal Schools have been opened at Vizagapatam and Cannanore, for the training of teachers for the Telugu Districts and the Western Coast. The Vizagapatam School has been placed under the management of Mr. Bickle, formerly assistant training-master in the

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Normal School at Madras. He is aided by a Native assistant, trained in the Madras School. At the close of the year, there were 16 students under training. The work is carried on in the building occupied by the Hindu School, which is used as a practising school. The Cannanore School has been placed, as a temporary arrangement, under management of the Deputy Inspector of Schools in Malabar and Canara; the Director of Public Instruction having been unable to find any competent head master, acquainted with the languages of the Western Coast, who could be placed in charge of it. Mr. Garthwaite has two assistants; one a European, educated in India, who is acquainted with the Canarese language, and the other a Native, trained at the Normal School, whose vernacular language is Malayalum. Mr. Garthwaite himself is conversant with both languages. He has been instructed to devote eight months out of the twelve to the school, and the remaining four to inspection. Twenty-one students are under training, eight of whom are being trained at the expense of the Travancore and Cochin Governments for employment in those territories. The Practising School contains 122 pupils.

724. Madrasa-i-azam.—The progress of the Madrasa-i-azam has been highly satisfactory. It contained, at the close of the year, 291 pupils; and in respect of regularity in the attendance, there is not a school throughout the Presidency by which it is surpassed. The discipline also is very good, and the pupils have made very fair progress in their studies; although the standard attained is not high, being somewhat below that required for the University Matriculation examination. On the whole the re-organization of this institution may be looked upon as a decided success.

Names of Schools.	No. of pupils on the roll on the 30th April 1862.
Bellary	250
Calicut	266
Combaconum	225
Chittoor	227
Rajahmundry	138
Berhampore	99
Cuddapah	84
Kurnool	129
Cuddalore	197
Salem	185
Madura	235
Total	2,035

725. Provincial and Zillah Schools.—The Reports on the Provincial and Zillah Schools are generally favourable. Tested by the results of the University Matriculation examination, the Combaconum School stands at the head of the list. Out of the 82 students who passed that examination, 16 had received their education, either wholly or in part, in this school. The Inspector reports that he found this school in a high state of order and discipline, and that the results of the examination conducted by him were generally satisfactory, though the average marks obtained were lower than in former years. The Reports of the Bellary and Calicut Schools were on the whole favourable. In both, the proficiency of the students of the English language was decidedly improved. At Bellary the Inspector found the Arithmetic of the higher classes somewhat defective, and at Calicut there was a falling off in the Geometry of the two higher classes. The latter school will shortly be removed into a commodious school-house, towards the erection of which the inhabitants of the district have contributed upwards of 7,000 rupees. There is a marked desire for education at Calicut among all classes of the community; and hitherto the number of pupils in the Provincial School has only been limited by the want of room. This school promises to be one of the largest in the country. Of the Zillah Schools, that at Chittoor stands the highest. The Report on the Madura School is less favourable than in former years. In some subjects, too much had been attempted, and there was a want of thoroughness in the work. The progress of the Berhampore School was very indifferent, owing, apparently, to the negligence of the head master, who has been lately removed. The new school at Kurnool has made considerable progress.

Name of School.	Number of pupils on the 30th April 1862.
Chicacole	72
Ellore	55
Adoni	37
Anantipur	67
Pennacondah	49
Wallajapetta	147
Mayaveram	70
Chowghaut	61
Total	558

726. Anglo-Vernacular Schools. — The Anglo-Vernacular Schools at Chicacole and Ellore are in a tolerably satisfactory condition. Those at Adoni and Anantipur have fallen off in numerical strength; in the former case, the cause may, perhaps, be in the teaching, but this does not hold in regard to the latter, at which the teaching is decidedly efficient. The school at Pennaconda has been in operation only six months, and the pupils are all beginners; at first, the attendance was not as large as was hoped for, but an increase took place towards the close of the year. The Anglo-Vernacular School at Wallajapettah is progressing favourably; but it has not yet reached a high standard. The school at Mayaveram, on the transfer of the Normal Class to Trichinopoly, was constituted an Anglo-Vernacular School. The Inspector has not yet had sufficient opportunity to watch the working of the institution under its new phase. An Anglo-Vernacular School was established at Chowghaut in June 1861, and has met with a fair measure of success. The number of students, when the school was reported upon, was only 61; but this arose from a violent attack of small-pox, which broke out in the town, and raged to such an extent that the school had to be closed.

Taluk Schools.	No.	Number of pupils on the 30th April 1862.
In Ganjam	4	110
,, Vizagapatam	6	220
,, Godavery	8	427
,, Kistna	2	47
,, Madras	6	387
,, North Arcot	3	294
,, Salem	4	206
Carried forward	33	1,691

727. Taluk Schools.—The Taluk schools display great inequalities in their numerical strength, that at Old Arcot containing as many as 166 pupils, while three others number fewer than 20 each. Generally the most important schools of this class are to be met with in the Madras and North Arcot and South Arcot Districts; but there are individual schools in other parts of the Presidency showing a very satisfactory attendance, such as those at Srirangam and Dindigul in Madura, Udamalkotai in Coimbatore, Trivadi in Tanjore, Kristnagiri in Salem, and Bimlipatam in the Vizagapatam District. The schools in Canara and Ganjam are among the weakest. There are, of course, great differences in the progress of these schools, but, on the whole, there can be no question that a considerable amount of very useful work is done by them. In the higher classes of many of them, greater attention appears to have been paid to translation during the past year.

728. Hill

Taluk Schools.	No.	Number of pupils on the 30th April 1862.
Brought forward	33	1,691
In South Arcot -	8	369
„ Tanjore - -	6	241
„ Coimbatore -	7	317
„ Madura - -	4	220
„ Malabar - -	2	91
„ Canara - -	4	104
Total - -	64	3,033

728. Hill Schools in Ganjam.—The Hill Schools in Goomsur and Chinna Kimedy have continued to improve. Four old schools have been abolished, and four new ones have been set on foot in their place; upon the whole, there are now 572 scholars in attendance against 521 in 1861. The standard has been somewhat raised in most subjects; the study of "Euclid," also, has been commenced in several of the schools. The Inspector observed that considerable benefit had resulted from the three months' course of instruction which was given last year at the Aska Taluk School to the teachers of the Hill schools; and the masters, with the exception of those of the four new schools and one of the old ones, have been again assembled at Russelcondah for further training.

729. Meriya School at Uperbago.—The Meriya School at Uperbago, when visited by the Inspector, contained 32 Khond boys, the children of rescued Meriyas settled in the neighbouring villages. It was kept up by means of a Government allowance, supplemented from the private funds of the agent for the suppression of Meriya sacrifices. The instruction conveyed was of an extremely low order, the teachers being very inferior, and the school being destitute of educational appliances. As the Meriya Agency has been abolished, it has been proposed that the school should be constituted a Taluk School.

730. Rate Schools in the Godavery District.—The question which for some time past has been under discussion in regard to the rate levied in certain villages of the Godavery District for the maintenance of elementary schools, has been recently brought before Government for final decision.

The Bill prepared by the Director will be brought before the Local Council for making Laws and Regulations, when it re-assembles.

A copy will be found in the Appendix.

731. Grants-in-aid.—The amount expended in grants-in-aid during 1861–62 was 40,795 rupees, of which the sum of 34,310 rupees was given in aid of the salaries of teachers.

732. Church Mission School at Masulipatam.—In the first educational division the aided school which holds the highest rank is that at Masulipatam, belonging to the Church Mission Society. The Inspector reports that the superiority of the school is evidenced in all subjects save Mathematics, in which the standard has been somewhat lowered. To compensate for this, however, fresh studies, such as Greek, Sanscrit, and Chemistry, have been introduced. Particular commendation is given by the Inspector to the English composition of the senior pupils.

Number of pupils on the 30th April, 1862—185.

733. Onslow Institution at Chetterpore and the Hindu Schools at Vizagapatam and Masulipatam.—The most important of the other aided schools are the Onslow Institution at Chetterpore, the Hindu School at Vizagapatam, and the Hindu School at Masulipatam. Of these the first-mentioned has been re-organized during the past year on the model of a Zillah School; but the standard as yet is not above that of a Taluk School. The Vizagapatam Hindu School suffered greatly during the year, first from the inefficiency of the head master, who had to be removed from his post; and, secondly, from the death by cholera of the second master. These circumstances, together with the withdrawal of some of the most advanced pupils by the Normal School lately established at the station, fully account for a falling off in the numerical strength of the institution, and for certain deficiencies which were observed by the Inspector on the occasion of his examination. So far as funds are concerned, the school is in a most prosperous condition, the income more than covering the expenditure, while there is a balance in hand of about 7,000 rupees, part of which is intended to be devoted to the building of a school-house. The Hindu School at Masulipatam afforded, generally, satisfactory results on its examination by the Inspector of the division; the standard of the highest class is, however, decidedly low, and the teaching power is far from sufficient. The finances, also, are not in a satisfactory state, the expenditure exceeding the income every month.

Number of pupils on the 30th April, 1862—83.

Number of pupils on the 30th April, 1862—107.

Number of pupils on the 30th April, 1862—157.

734. Vizagapatam Orphan Asylums.—The Vizagapatam Orphan Asylums, visited in July 1861, though exhibiting a falling off in numerical strength, presented marked improvement in the proportion of pupils in the higher classes compared with the lower ones, and in the attainments of the several classes. The Inspector observes that to attain any considerable advance beyond the point now reached, the introduction of superior teachers would be requisite; but for this step the funds of the institution are not sufficient.

Number of pupils on the 30th April, 1862—46.

735. Roman Catholic School at Bellary.—In the second division, the Roman Catholic Schools at Bellary are reported to have improved considerably, owing to careful supervision on the part of a resident missionary. The teaching staff, however, stands in great need of being strengthened, and sufficient weight does not appear to be attached to the study of Telugu in the English School. It may be observed that the grant-in-aid principle has been but little applied in this division.

Number of pupils on the 30th April, 1862—243.

736. School at Saint Thomas' Mount.—Of the aided schools in the third division, that at Saint Thomas' Mount was for some time in a declining state, the inhabitants of the locality in several cases sending their children elsewhere in preference. On the Inspector of the division holding a conference with the supporters of the institution, he discovered that the root of the evil lay in the unfitness of the head master for his post on

Number of pupils on the 30th April, 1862—109.

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more grounds than one, the man being maintained, however, in his situation by the countenance of some of the managers of the school. By judicious representations, the Inspector secured the appointment of a fresh master; and the institution having since been thoroughly re-organized by the Deputy Inspector, it is to be hoped it will be more successful hereafter.

Number of pupils on the 30th April 1862—246.

737. Hindu Anglo-Vernacular School at Royapetta.—The Anglo-Vernacular School at Royapetta, supported by natives, was found by the Inspector in a fairly satisfactory condition; the principal defects noted being a want of order in the conduct of the school business, and a failure to fall back upon the vernaculars in explaining the meaning of words and phrases. One point deserving commendation was the care taken by the head master to secure correct English in the answers to his questions. The school was not supplied on a sufficiently liberal scale with black boards and other educational appliances.

Number of pupils on the 30th April 1861—213.
Number of pupils on the 30th April 1862—370.

738. Wesleyan Mission Boys' School at Royapetta.—The Wesleyan Mission Boys' School at Royapetta was inspected at the beginning and not towards the close of the year 1861-62; the results, therefore, scarcely require any notice in this Report. It may be mentioned, however, that the institution received a large numerical increase during the year, a circumstance no doubt due to the return from England of the European Missionary at the head of the school. Two of the students, it may be remarked, passed the Matriculation examination in February last, being placed in the second class.

Number of pupils on the 30th April 1862—383.

739. Central Institution Free Church of Scotland.—The Central Institution is the largest and most important of the schools of the Free Church of Scotland. It appears that the time-table is a very well devised one; but that the execution of the plan is not quite on a level with the conception. More attention is recommended to be paid to translation, and more practice on paper given to the classes in Euclid and Algebra. The Inspector terminates his Report upon the institution thus: "My conclusion after a more minute and extended inspection than I have ever before exercised is that the school is doing great good, and likely to do more, and that few, if any, institutions are better entitled to Government aid."

Number of pupils on the 30th April 1862—230.

740. Tanjore High School, S. P. G. F. P.—In the fourth educational division, the Gospel Society's School at Tanjore is reported on most favourably in regard to discipline; and in point of attainments, the Inspector considers it to hold the first place among the aided schools coming under his notice. The studies of the highest class were found to be much in advance of those of the previous year, owing to the members of the old senior class having remained in the institution. The principal defect was in Algebra, in which too much had been attempted; the lowest classes also did not acquit themselves altogether satisfactorily.

Number of pupils on the 30th April 1862—66.

741. Vediarpuram Seminary, S. P. G. F. P.—The boys in the senior class of the Vediarpuram Seminary, belonging to the Gospel Society, answered very creditably in English, but not so well in Tamil; while the reverse was the case with regard to the second class. In the other subjects of study, the results were for the most part good, and History and Geography, very good. The remaining classes also, with the exception of the lowest, answered creditably.

Number of pupils on the 30th April 1862—124.

742. Coimbatore Anglo-Vernacular School.—The fifth division is that in which the grant in-aid system has the widest application. The Coimbatore Anglo-Vernacular School had made marked progress when the Inspector visited it; the chief improvement had taken place in the senior classes, and was most evident in English, History, and Map-drawing.

Number of pupils on the 30th April 1862—178.

743. Palamcottah Training Institution, C. M. S.—The Church Missionary Society's Training Institution at Palamcottah, which is intended mainly to supply masters for village schools, and in a few instances for Anglo-Vernacular or boarding schools, is spoken of very favourably with reference to its arrangements and management. Physical exercises secure a share of attention as well as religious and intellectual training; and the Inspector remarks that the pupils, who are native Christians from the neighbouring villages, seemed to enjoy a game of cricket to an extent not commonly seen in this country. Instruction is chiefly carried on in Tamil, English being proposed to be learned merely as a language. Besides the Normal School, the institution comprises a model and a practising school. Of the two latter, the Model School did not appear to be conducted as successfully as could be wished; the Practising School is the school of a neighbouring village. The Institution had suffered to a certain extent owing to the absence of some of the teachers; still the senior class acquitted itself fairly in most subjects, and the result of the Inspector's examination was favourable on the whole, though the lower classes appeared somewhat deficient in Arithmetic and Algebra.

Number of pupils on the 30th April 1862—62.

744. Sawyerpuram Training Institution, S. P. G. F. P.—The Sawyerpuram Training Institution, supported by the Society for the Propagation of the Gospel, is in many respects similar to that at Palamcottah under the Church Missionary Society. In one point, however, there is striking difference; while substantive instruction is imparted in Tamil, in the latter school, it is conveyed in English at Sawyerpuram. The Inspector was doubtful whether this might not affect the soundness of the instruction in Tamil; but, on examining the pupils, he found that they had not neglected their vernacular, and that

they

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they could reproduce in Tamil what they had learnt in English. The senior students did not appear quite sufficiently advanced in the English language for the book which they were reading; and the junior division of the highest class afforded unsatisfactory results in this branch of their education. There was also a deficiency in the theory of parts of Arithmetic; but the defect was not peculiar to Sawyerpuram. In other respects the result of the inspection was decidedly creditable to the institution, which is very efficiently conducted.

745. Aided Schools on the Western Coast.—The principal aided schools on the western coast are those belonging to the Basle Mission at Tellicherry and Mangalore. The standard in each is low; and, like the other institutions in the same locality they suffer from the extreme difficulty which is experienced in securing fairly qualified masters.

Number of pupils on the 30th April, 1862—

School at Tellicherry - - -	122
Do. at Mangalore - - -	93

Plan for the improvement of the indigenous village schools in the Coimbatore District.

746. Reference was made in the last report to an experiment which was being introduced in the Coimbatore District for the improvement of the indigenous schools by making small periodical grants to such of the village masters as place their schools under inspection, and manifest a desire to follow, as far as they can, the advice tendered to them and use the books in use in Government schools. The grants depend on the number of pupils able to read intelligently, to write fairly from dictation, and to work sums in the first four rules of Arithmetic. As yet the experiment has been confined to four Taluks, and an expenditure of 100 rupees per mensem has been sanctioned for grants, but as yet not much more than one-third of this sum has been expended. This the inspector states does not arise from any indisposition on the part of the people to take advantage of the grants, but from the difficulty they experience in fulfilling the conditions laid down, owing to the incompetency of the old class of village schoolmasters. The number of schools receiving grants at the close of the year was only 17; but besides these there are now 50 schools under regular inspection. The aggregate attendance in the 67 schools according to the latest returns was 1,277, and, in nearly all, a better system of classification has been introduced, and the same text-book is now generally made use of throughout each class. In some 37 of the schools the old cadjan books have been given up, and the printed books used in the Government schools have been introduced; and this step would have been taken in most of the other schools had not the stock of elementary readers in the District Book Depôt run out, and some delay occurred in replenishing it. The experiment will be continued and extended to one or two other districts during the present year.

747. Minor Proprietors under the Court of Wards.—The several minor proprietors under the Court of Wards have been examined by the educational Inspectors of the divisions in which they reside. At the close of the year six of them were attending school, but the progress, in nearly every case, has been very indifferent. In a Report which the Director of Public Instruction addressed to the Court of Wards, he made the following remarks on the insufficiency of the present arrangements:

"The general tenor of the Reports, of which an abstract is given in the preceding paragraphs, affords, I think, additional evidence of the insufficiency of any arrangements that can be made for the education of the minors, either at schools in the provinces, or under the instruction of private tutors residing with them on their estates.

"In the former case, the master of the school can exert little or no influence out of school hours over the conduct of the boy, who, being without those incentives to industry and regularity in attendance, which usually operate with native pupils of a lower rank in life, makes but slow progress. In the latter case, it is almost impossible for the tutor, however zealous and able, to counteract the pernicious influences of foolish and unprincipled parasites, who form the daily associates of his pupil in his own home; and there can be little hope of inculcating moral principles of truthfulness, or habits of self-control, order, punctuality and industry, which are essential not only to his progress in his studies, but to the formation of his character for the discharge of his duties in after-life. For these reasons I would strongly recommend that steps should be taken, as soon as possible, to carry out, in the case of those minors whose estates can afford it, the arrangement determined on by Lord Harris's Government, for placing them under the care of a tutor at the Presidency, or such modification of it as may be deemed feasible.

"I would suggest, as an experiment, and as the most economical mode of carrying out the object in view, that one of the professors of the Presidency College should be appointed to take charge of them, and to exercise a general superintendence over their studies. A house might be taken for the purpose, in the neighbourhood of the Presidency College, in which the professor and the minors should reside. The minors should attend either the Presidency College, or one of the schools attached to the Government Normal School, according to their attainments; and it should be the duty of their tutor to enforce regularity of attendance, to see that they prepared their lessons, and, generally, to assist and direct them in their studies. A salary of 200 rupees or 300 rupees per mensem, with free apartments, in addition to the salary of his professorship, would, I imagine, be sufficient to secure the services of one of the professors. A beginning might be made by bringing down the minors of Casimcottah, Ayacudi, and Saptur, and, possibly, the minor of Utear; and the Court would probably be able to add others to the list, including the sons of living zemindars, as proposed in my Memorandum of the 30th November 1859, and approved by the Secretary of State in his Despatch of the 31st July last."

The Court of Wards have not felt themselves in a position to act on this suggestion, partly owing to the difficulty of collecting a sufficient number of minors whose incomes

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would be sufficient to bear the expense of their education at the Presidency upon the plan proposed, and, partly, on the ground of objection which they apparently entertain to sending the minors to the Presidency Town. The question is now under the consideration of Government in connexion with the Court's Annual Report on the estates under their charge.

748. Civil Engineering College.—The Civil Engineering College continued throughout the year under review to comprise only a second or lower department, intended to educate candidates for subordinate appointments on the public works.

The following statement shows the variation in the numerical strength of the College during the year:

At close of 1860–61:	
Number of students - - - - - - - -	107
Admitted during last session - - - - -	40
Left during last session - - - - - -	57
Remaining at close of session - - - - -	90

Of the civil students who left during the session, 15 received certificates of qualification, one was removed as unlikely to profit by the instruction, and 17 left of their own accord. Of the military students, five obtained public employment, six were removed for misconduct, and 13 left at their own request.

The senior class, containing 25 students, underwent a searching examination at the end of the session, and the result was on the whole decidedly satisfactory. It was evident that the majority of the men had obtained a very fair knowledge of the several subjects belonging to their course of study; and, with regard to practical applications, as much had been done as was possible in the face of opposing difficulties. It may be mentioned that during the year a course of Lectures on Geology with special reference to India and the Madras Presidency, was delivered at the College by Mr. Bruce Foote of the Geological Survey; and, considering that the students had not the advantage of text books, their answering in the subject when examined by the lecturer after the conclusion of the course, indicated that they had derived considerable benefit from the lectures.

At the close of Session:

19	students obtained certificates	as assistant overseers.
5	do.	as sub-overseers, 1st class.
2	do.	as do. 2nd do.
5	do.	as draughtsmen and estimate makers.
4	do.	as surveyors.

In the course of the year Government sanctioned the establishment of a first department to train assistant engineers. Sixteen candidates have come forward, including 10 commissioned officers and four civilians. The class will be formed at the commencement of the next session.

749. Medical College.—The Medical College contained at the close of the year, 11 students in the senior department, which is intended for the instruction of candidates for a medical degree, or for the appointment of civil sub-assistant surgeon; 19 in the second, in which provision is made for the education of candidates for the appointment of assistant apothecary; and 87 in the third department, in which candidates are prepared for hospital assistantships.

The general conduct of the students during the year was very satisfactory; the attendance also in the senior and second departments was most regular, but that in the third department was less creditable.

The new Museum is now open to the students, and is calculated to be of much benefit to the College.

The results of the examination of candidates for admission into the subordinate medical service, held at the close of the session by a Committee appointed by Government, were generally satisfactory, all the members of the senior class in the second department, and 31 out of 32 students in the third, or junior department, having passed for their respective grades. The answering, however, of the senior class in medicine was not on a level with the answering of the same students in the other subjects in which they were examined.

750. School of Arts.—The Committee appointed to examine into the working of the School of Arts, and report upon the expediency of continuing to maintain that institution, presented their Report to Government on the 23d October, 1861. They recommended that the school should be kept up, a few alterations being introduced to add to its efficiency. Paragraph 5 of their Report is as follows:—" After weighing the various evidence which we collected of the results produced by the institution, the Committee arrived at the conclusion that it is desirable to continue the institution. In the Industrial Department, carpentry and blacksmiths' work had been wisely abandoned, and instruction has latterly been confined to brick and tile-making, and pottery in its various branches. In these arts, abundant evidence was forthcoming to show that there was an urgent need of improvement, and that the interests of Government and the community suffered by the badness of building materials prepared in the native methods. The Committee were satisfied from the results of their inquiries that the School of Arts has effected great improvement in this important respect, and may be expected to produce still greater good as its operations

take decided hold in the native community. It is to be recollected that in this country a school of arts has not merely to direct and guide, it has to elevate and almost create the particular branch of industry now under discussion; and a single institution of very moderate size can but proceed slowly in exerting an extensive influence in so great an area as that in which the Madras School of Arts is placed."

The order of Government reviewing the Committee's Report, and the observations made on it by the Director of Public Instruction, will be found in the Appendix.

751. Ootacamund Lawrence Asylum.—Arrangements have been made, with the sanction of the Secretary of State, for the extension of the Lawrence Asylums at Ootacamund. The Government grant has been raised to 4,000 rupees per mensem, which, it is estimated, will suffice for the education and maintenance of 150 boys and 80 girls. The erection of new buildings for both asylums will shortly be commenced. They are designed to accommodate 200 boys and 100 girls, as it is expected that public contributions will be raised sufficient for the support of 50 boys and 20 girls, in addition to those provided for by the Government grant. Pending the erection of the requisite buildings, temporary arrangements have been made for increasing the accommodation at present available for the Boys' Asylum by renting a commodious house immediately adjoining it, which will admit of the number of boys being at once raised to 150. A similar arrangement with reference to the Girls' Asylum is under consideration. The question of removing the Madras Military Orphan Asylums to the Neilgherry Hills, and uniting them with the Lawrence Asylums, has been reserved for further consideration.

752. Army Schools.—The office of Superintendent of Army Schools having been placed in abeyance, the schools have again been put in connexion with the Department of Public Instruction. During the past year a very considerable number of army schools have been examined and reported upon by the Inspectors, copies of the Reports being submitted to His Excellency the Commander in Chief. The schools attached to European corps will no doubt be improved without much difficulty, the military class at the Madras Normal School going far to meet the demand for masters. Those, however, in connexion with native regiments, cannot be expected to make much advance under existing circumstances. The tenor of the Inspectors' Reports upon the latter schools is, in most cases, very unfavourable. A plan for their improvement, which would admit of their being provided with more efficient teachers at no great increase of cost, was submitted to Government in 1860, but various measures which have recently occupied the Government in connexion with the Native Army have prevented its being taken up.

Total Expenditure of Educational Department.—The expenditure from the Public Treasury was about 5,44,672 rupees, distributed as follows:—

		Rs.
Salary and office charges of the Director of Public Instruction		40,533
Salary, office charges, and travelling allowances of the Inspectors and Deputy Inspectors		80,372
University of Madras		4,104
Government colleges and schools		2,80,000
Grants-in-aid		35,000
Grant to the Madras School Book Society		2,000
Preparation and purchase of school books		35,143
Educational buildings, inclusive of building grants made to private schools		66,150
Government Central Book Depôt		1,370
Total		*Rs.* 5,44,672
Deduct—	*Rs.*	
School fees	6,148	
Proceeds of sale of books	28,573	
		34,721
		Rs. 5,09,951

Donations, amounting to 8,407 rupees, were contributed by the public, principally for the erection of school-houses.

ECCLESIASTICAL.

Diocese administered by the Commissary.

753. For the first seven months of the year 1861-62, the diocese of Madras was administered by the Commissary, the Rev. Thomas Dealtry, Acting Archdeacon.

Difficulty of supplying stations with chaplains.

754. During that period, no event calling for remark occurred. The only difficulty which the Commissary experienced, was that of supplying important stations with chaplains, arising from the absence of many on the list, from sickness and other causes.

Consecration and arrival in Madras of bishop.

755. On the 29th of June, the Rev. Dr. Gell was consecrated Bishop by the Archbishop of Canterbury, arrived at Madras on the 25th November, and was installed in St. George's Cathedral on the 27th of the same month.

Archdeacon appointed.

756. His first act on arriving was to appoint the Rev. T. Dealtry, Archdeacon of Madras, who was duly inducted into the office on the 1st December 1861.

First Ordinance and Pastoral tour.

757. On Sunday the 22d December, the Bishop held his first ordination in the diocese, at St. George's Cathedral, when three candidates were admitted to Deacon's Orders, all missionaries in connexion with the Society for the Propagation of the Gospel.

758. Ootacamund Lawrence Asylums.—The question of amalgamating the Madras Military Orphan Asylums with the Ootacamund Lawrence Asylums has been reserved for future consideration by the Secretary of State for India, as it is considered doubtful whether an elevated table land, such as that of the Neilgherries, is suited to the constitution of East Indian children. It has been decided, however, that the Lawrence Asylums at Ootacamund shall be established on a proper scale, without delay, for the reception of children of European descent.

On 29th January 1862 the Bishop, having previously visited the churches in Madras, set out, accompanied by his domestic chaplain, to visit a portion of the diocese.

In a tour of six weeks he visited the chaplaincies of Cuddalore, Tranquebar, and Trichinopoly; and the mission stations of Cuddalore, Nagpoor, Negapatam, Tanjore, Vediarpuram, Canandagudy, Amiappen, Combaconum, Alambacam, and Erungalore.

Emmanuel Church in Black Town consecrated.

759. After his return to Madras, Emmanuel Church in Black Town, which was projected many years ago, but not completed till this year, was consecrated on the 12th April.

Establishment of Diocesan Board of Education.

760. A Diocesan Board of Education has been established, for the purpose principally of promoting the Christian education of the children of Europeans and Eurasians, in connexion with the Church of England.

Change of chaplaincies.

761. No change of any importance has been made in the arrangements of the chaplaincies, except that the chaplain of Seetabuldee has been instructed to reside at Kamptee; so that he and the chaplain of Kamptee are, in fact, joint chaplains of Kamptee and Seetabuldee with their out-stations.

At the present time there are no fewer than 13 stations without chaplains. Owing to various causes 12 of the chaplains are absent from their duty. (*See* Appendix B.)

It will be observed that there are two vacancies, one caused by the retirement of the Rev. A Fennel in India on the 31st December 1861, the other by that of the Rev. A. J. Rogers in England, recently reported.

Appended are the usual tabular forms, showing—

A. The state of the chaplaincies.
B. The clergy, who, though not chaplains, receive allowances from Government.
C. A correct list of the chaplains.

Senior Chaplains.

Rev. F. G. Lugard.
Rev. M. N. Stone.

Chaplains.

Rev. J. Griffiths.
„ A. H. Alcock.
„ J. Gorton.
„ A. Kinloch.
„ W. B. Ottley.
„ G. E. Morris.
„ J. Richards.

Rev. C. D. Gibson.
„ J. V. Bull.
„ R. Firth.
„ T. Dealtry.
„ R. Murphy.
„ C. Rhenius.

Assistant Chaplains.

Rev. W. R. Capel.
„ J. T. D. Kidd.
„ W. W. G. Cooper.
„ S. T. Pettigrew.
„ J. D. Ostrehan.
„ H. P. James.
„ T. A. C. Pratt.
„ R. P. Little.

Rev. G. B. Howard.
„ C. R. Drury.
„ J. J. B. Sayers.
„ K. C. Baily.
„ B. O'M. Deane.
„ J. McKee.
„ A. W. Pearson.
„ H. Barnes.

Rev. J. W. Wynch.
„ O. Dene.
„ G. English.
„ J. Murphy.
„ T. Foulkes.
„ A. Taylor.
„ W. S. Smith (not ranked).

TABULAR STATEMENT of the MADRAS ECCLESIASTICAL ESTABLISHMENT.

(A.)

THE PRESIDENCY AND ITS SUBURBS.

Principal Stations.	Churches or Chapels.	Out-stations.	Churches or Chapels.	Chaplains.	Number of Chaplains sanctioned.	Deficiency in Supply of Chaplains.	REMARKS.
St. George's Cathedral	1 Church	Chingleput	None	Rev. C. D. Gibson, Rev. F. G. Lugard, acting for Rev. R. Murphy, LL.D., absent on sick leave.	2	–	
St. Mary's, Fort St. George.	1 Church	None	–	Rev. A. H. Alcock	1	–	
Black Town	2 Churches and 2 Chapels-of-ease.	None	–	Rev. C. R. Drury	2	1	
Vepery	1 Church	None	–	Rev. A. W. Pearson	2	1	
St. Thomé	1 Church	None	–	The Venerable the Archdeacon	1	–	
St. Thomas's Mount	1 Church	None	–	Rev. W. W. G. Cooper	1	–	Acting for Rev. J. Richards, on tour of duty on the Hills.
Palaveram	1 Chapel	None	–	Supplied by Rev. W. W. G. Cooper.	1	1	
Arcot	1 Church	None	–	Supplied by Rev. Dr. Sayers, chaplain of Vellore.	1	1	
Bangalore	3 Churches and 1 Chapel-of-ease.	Hurryhur, Toomkoor, Shemogah, Cossoor, Royacottah, Remount Depôt.	None	Rev. J. Gorton, Rev. G. E. Morris, and Rev. J. V. Bull.	3	–	

STATIONS NOT WITHIN THE LIMITS OF THE PRESIDENCY.

Bellary	1 Church	Gooty, Kurnool, Ramanully, Cuddapah, Lingasagoor.	1 Church	Rev. B. O'M. Deane	1	–	
Berhampore	None	Chetterpore, Russelcondah, Aska, Ganjam, Gopaulpore, Munsoorcottah.	None	Rev. W. B. Ottley, absent on tour of duty at Ootacamund.	1	1	
Calicut	None	Maliapooram	None	Rev. J. McKee	1	–	
Cannanore	None	Tellicherry	None	Rev. C. Rhenius	1	–	
Coonoor	1 Church	Coimbatore, Palghaut, Kotagherry.	2 Churches	Supplied by Rev. J. Richards	1	1	
Cuddalore	1 Church	Pondicherry, Porto Novo	1 Chapel	Rev. J. Griffiths, absent on sick leave.	1	1	
Jaulnah	1 Church	Aurungabad, Mominabad, Hingolee.	None	None	1	1	
Kamptee and Seetabuldee.	2 Churches	Ellichpoor, Hosingabad, Raepoor, Chandah, Chundromah, Rundromah.	None	Rev. S. T. Pettigrew, Rev. A. Taylor.	2	–	
Masulipatam	2 Churches	Ellore, Condapillay, Guntoor, Ongole.	–	Rev. G. English	1	–	
Mercara	1 Church	Mangalore, Pootoor, Honawer, Sedashegur, Sircy, Hoonsoor, Fraserpett.	–	–	–	1	
Mysore	1 Church	French Rocks	1 Chapel	None	1	1	
Ootacamund	1 Church	None	–	Rev. W. B. Ottley	1	–	
Palamcottah	1 Church	Tuticorin, Courtallum	2	None	1	1	
Poonamallee	1 Church	Tripasore	1 Church	None	1	1	
Quilon	1 Church	Trevandrum	1 Church	None	1	1	
Rajahmundry	None	Samulcottah, Coconada, Coringa, Dowlaishweram.	1 Church	Rev. J. Murphy, LL.D.	1	–	
Secunderababad	1 Church	Bolarum, Hyderabad, Chudderghat.	2 Churches	Rev. T. A. C. Pratt, Rev. H. P. James, Rev. T. Foulkes.	3	–	
Tranquebar	1 Church	Negapatam, Combaconum	2 Churches	None	1	1	
Trichinopoly	1 Church	Madura	1 Church	Rev. O. Dene	2	1	
Vellore	1 Church	Chittoor	1 Church	Rev. Dr. Sayers	1	–	
Vizagapatam	1 Church	Waltair, Bimlipatam, Vizianagram, Chicacole, Calingapatam.	3 Churches	Rev. J. Wynch	1	–	
Wellington	None	–	–	Rev. J. Richards	1	–	

(B.)

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OUT-STATIONS where Uncovenanted Ministers of the Church of England are supplying spiritual wants, receiving a Grant-in-aid from Government.

Places supplied.	Primary Stations relieved.	Clergyman employed.	Society to which they belong, and Allowances granted.
Shevaroy Hills - - - -	Cuddalore - - -	Rev. T. H. Wilkinson -	Colonial and Continental Church Society, 100 rupees per mensem.
Cochin - - - - -	Quilon - - -	Rev. J. Collins - -	Colonial and Continental Church Society, 100 rupees per mensem.
Nellore - - - - -	The Cathedral, Madras -	Rev. S. H. Compton -	Colonial and Continental Church Society, 100 rupees per mensem.
The Fort, Toomkoor, Hurryhur, Shemogah.	Bangalore - - -	Rev. P. Webber - -	Colonial and Continental Church Society, 100 rupees per mensem.
Cuddapah, Gooty, Kurnool, Lingasagoor.	Bellary - - -	Rev. P. Jelly - -	Belongs to no society, 100 rupees per mensem.
Tanjore - - - - -	Trichinopoly - -	Rev. S. Percival - -	Gospel Society, 80 rupees per mensem.
French Rocks and Mysore - -	Mysore - - -	Rev. S. T. Godfrey -	Belongs to no society, 100 rupees per mensem.
Christ Church, Mount Road, Madras.	Cathedral district - -	Rev. C. Lillingstone -	Colonial and Continental Church Society, 200 rupees per mensem.
Pulicat - - - - -	Cathedral - - -	Rev. C. C. Shutie -	Colonial and Continental Church Society.
Black Town - - - -	Place of another chaplain supplied.	Rev. H. Hickey - -	Belongs to no society, 100 rupees per mensem.

MEDICAL.

Health of the country.

762. The public health in the Madras Presidency has been influenced considerably by the prevalence of epidemic diseases, chiefly cholera, small-pox, and fevers in many districts. The rainfall in many parts was below the average, and much scarcity and distress prevailed amongst the lower classes of inhabitants.

Civil dispensaries.

763. In the civil dispensaries of the various collectorates, there has been a slight falling-off in the number of sick treated; and the decrease has been entirely attributable to the introduction of new rules, from the beginning of the financial year 1861–62, whereby an attempt was made to induce the people to take upon themselves in some degree the support of their sick poor.

The self-supporting system can scarcely be said to have been fairly tried in many of the civil dispensaries. In some it has succeeded very well, but in other instances the natives have shown much apathy in contributing towards the dieting expenses of the sick poor. The system is novel; and the people have been so accustomed to look to the Government to do everything for them, that it will probably take some years yet before the support of these charities is entirely a matter of local arrangement.

Government contribution to dispensaries.

764. Government now contributes a supply of medicines, the services of a medical officer and subordinate, and a fixed grant of 50 rupees per mensem, towards the expenses of dieting poor patients in each dispensary.

This sum is expected to be increased, by the voluntary contributions of the better classes of natives, and others locally interested in the various charities.

The following TABLE shows the Admissions and Deaths of In and Out-patients in the various Dispensaries, for the year ending 30th April 1862 :—

DIVISIONS.	In-patients.				Out-patients.				TOTAL.			
	Treated.	Died.	Average daily sick.	Per-centage of deaths to treated.	Treated.	Died.	Average daily sick.	Per-centage of deaths to treated.	Treated.	Died.	Average daily sick.	Per-centage of deaths to treated.
Presidency - -	10,366	779	659	7·5	96,401	131	1,452	0·1	106,767	910	2,111	0·8
Southern - -	3,375	281	147	8·3	80,221	107	904	0·1	83,596	388	1,051	0·4
Mysore - -	–	–	–	–	–	–	–	–	–	–	–	–
Malabar and Canara.	633	66	34	10·4	14,555	2	196	0·01	15,188	68	230	0·4
Ceded Districts -	748	45	27	6·01	18,496	38	215	0·2	19,244	83	242	0·4
Northern - -	1,715	106	5	6·1	22,276	78	61	0·3	23,991	184	66	0·7
Hyderabad Subsidiary Force.	177	19	17	10·7	3,542	1	50	0·02	3,719	20	67	0·5
Nagpore Force -	180	34	11	18·8	2,010	2	25	0·09	2,190	36	36	1·6
TOTAL - -	17,194	1,330	900	7·7	237,501	359	2,903	0·1	254,695	1,689	3,803	0·6
Total of 1860-61 - - - - -									283,698			
Decrease in 1861-62 - - -									29,003			

Vaccination.

765. The work of this department has not been generally satisfactory. The establishment of vaccinators, in the expectation of radical changes being sanctioned with a view to the introduction of a better class of men, have not worked zealously or well. Small-pox has been more than usually prevalent. In the Presidency town and suburbs it has been very rife for the whole of the year, and particularly in January, February, March, and April 1862.

The following Table shows a total decrease of 19,977 operations in the course of the year. Under the new arrangements, to be shortly introduced, it is to be hoped that the work of this department will be carried out under skilled supervision, and with greater benefit to the public than the present system can afford :—

STATEMENT showing the Number of Vaccinations performed in the Year 1861-62 contrasted with 1860-61.

DIVISIONS.	1860–61.				1861-62.					
	Number Vaccinated.	Successful.	Failures.	Ratio per 100 of Failures.	Number Vaccinated.	Successful.	Failures.	Ratio per 100 of Failures.	Increase.	Decrease.
Presidency - - -	52,943	48,829	4,114	77·7	49,456	45,393	4,063	82·1	–	3,487
Southern - - -	94,047	86,102	7,945	84·4	90,633	83,257	7,376	81·2	–	3,414
Mysore - - -	–	–	–	–	–	–	–	–	–	–
Malabar and Canara -	130,763	1,20,800	9,963	76·1	121,181	1,12,258	8,923	73·6	–	9,582
Ceded Districts - -	21,057	19,009	2,048	97·2	20,614	18,417	2,197	106·5	–	443
Northern - - -	36,241	31,916	4,325	119·3	33,705	28,788	4,917	145·8	–	2,536
Hyderabad Subsidiary Force.	2,996	2,706	290	96.7	2,424	2,162	262	108·08	–	572
Nagpore Force - -	656	421	235	358·2	713	472	241	338·0	57	–
TOTAL - - -	3,38,703	3,09,783	28,920	85·3	3,18,726	2,90,747	27,979	87·7	–	19,9 77

Gaol.

766. The health of prisoners in this Presidency is still very unsatisfactory, and the mortality during the year higher than usual. Most of the Madras gaols are overcrowded, deficient in means of ventilation, and, in a sanitary point of view, altogether unsuited for the congregation of large numbers of people.

Healthy condition of prisoners in the new gaol at Salem.

767. There has been a marked improvement, however, in the condition of the prisoners at Salem since the erection of the new gaol at that station; so unhealthy was the old building, that for many years past 46 per cent. of the whole mortality was caused by cholera. Since occupying the new building the prisoners have been free from the scourge. Cholera has prevailed severely in several of the gaols during the past year, and this disease has increased the gaol death-rate above the average. The gaol at Vizagapatam, which was formerly tolerably free from cholera, has been little better than a pest-house during the year. The prisoners have been removed, and the whole place cleaned and fumigated on two occasions, and while out of the gaol they were healthy; but cases of cholera were sure to recur on placing the prisoners

Vizagapatam gaol.

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again within the gaol. Representations have already been made to the Inspector General of Gaols on the necessity for abandoning the building entirely, as it seems clear, from careful inquiry, that the cause of unhealthiness is within the gaol itself.

The following Table shows the extent of sickness and mortality amongst prisoners in gaols during the year:—

Divisions.	Average Annual Strength.	Average Daily Sick.	Treated.	Died.	Percentage of		
					Treated.	Deaths to Strength.	Deaths to Treated.
1860–61:							
Presidency and Centre -	1,982	78	2,084	151	105·2	7·6	7·2
Southern - - -	1,900	118	3,460	127	182·1	6·6	3·6
Mysore - - - Malabar and Canara -	972	73	1,907	39	196·1	4·01	2·04
Ceded Districts - -	851	26	787	41	92·4	4·8	5.2
Northern - - -	621	2	846	52	136·2	8·3	6·1
Total - - -	6,326	297	9,084	410	192·6	6·4	4·5
1861–62:							
Presidency - - -	2,032	84	2,311	143	113·7	7·03	6·1
Southern - - -	2,143	117	3,914	148	182·6	6·9	3·7
Mysore - - - Malabar and Canara -	1,054	102	2,312	184	219·3	17·4	7·9
Ceded Districts - -	985	32	1,044	73	105·9	7·4	6·9
Northern - - -	694	3	1,048	95	151·0	13·6	9·06
Total - - -	6,908	338	10,629	643	153·8	9·3	6·4

Military.

768. The following Abstract return does not include the sick of Her Majesty's 91st Regiment—the necessary information regarding that corps not having yet been furnished.

The following Abstract Table will show the extent of Sickness and Mortality in the Military Department during the Year:—

Divisions.	Europeans.							Natives.						
	Average Strength.	Treated.	Died.	Average Daily Sick.	Percentage of			Average Strength.	Treated.	Died.	Average Daily Sick.	Percentage of		
					Treated to Strength.	Deaths to Strength.	Deaths to Treated.					Treated to Strength.	Deaths to Strength.	Deaths to Treated.
Presidency - - - -	2,008	3,483	57	186	173·4	2·8	1·6	3,701	3,523	57	190	95·1	1·5	1·6
Southern - - - -	787	1,838	15	75	233·5	1·9	0·8	3,064	1,449	31	50	47·2	1·01	2·1
Mysore - - - - Malabar and Canara - -	2,746	3,436	17	181	125·1	0·6	0·4	8,445	4,937	82 7	195	57·	1·03	1·7
Ceded Districts - - -	1,006	1,406	10	57	139·7	0·9	0·7	3,123	1,622	16	67	51·9	0·5	1·9
Hyderabad Subsidiary Force	3,449	4,854	40	196	140·7	1·1	0·8	5,742	2,900	22	137	50·5	0·3	0·7
Nagpore Force (excluding 91st Regiment) - -	314	408	5	16	129·9	1·5	1·2	4,088	2,485	25	81	60·7	0·6	1·006
Northern - - - -	316	310	9	1	98·1	2·8	2·9	8,172	3,788	77	11	46·3	0·9	2·03
Pegu - - - -	2,779	2,441	33	128	87·8	1·1	1·3	*2,334	1,243	19	65	53·2	0·8	1·5
Total - - -	13,405	18,176	186	840	135·5	1·3	1·02	38,669	21,947	334	796	56·7	0·8	1·5

* Returns of Pegu Sapper Corps not received.

Improved health of European and Native troops.

769. So far as the somewhat incomplete returns will allow of an opinion being formed, the sickness and mortality of the Army, both European and Native, have been much below the average of former years. The death-rate of European troops in the Mysore Division was only six per 1,000, in the Ceded Districts nine per 1,000, and in the large body of Europeans at Secunderabad only 11 per 1,000. The death-rate of the whole European Army, excluding the 91st Regiment, the returns of which are not available, has been 13 per 1,000 of strength—a rate absolutely below that of any former year.

The Native Army, a smaller portion of it being on foreign service, has been less affected by sickness than usual; the proportion of "treated to strength" was 56·7 per cent., and of deaths to strength 0·8. Altogether, the sanitary condition of the Army during the past year has been very remarkable: but for venereal diseases, which have been generally prevalent, there has been but little sickness of any note.

EMIGRATION.

Number of emigrants embarked.

770. The number of emigrants that have left Madras for the Colonies during the past year is about the same as that of 1860–61, the only noticeable difference being that they have been engaged in this country for particular planters, instead of as formerly being sent to the Government of Mauritius, and assigned there; and that a large proportion have taken service on the railway now in course of construction in that colony. Ordinary labourers on this work will receive similar wages to those employed on estates; but a large number of artificers, carpenters, bricklayers, and blacksmiths proceeded in the same employ; first-class workmen to receive 17½ rupees a month, and second class 15 rupees, with the usual batta, hutting, &c. It is possible that at the close of the three years' contract which they first entered into, so many skilled workmen may not be able to re-engage at such high rates. The emigration agent at the Mauritius has therefore been requested to permit all those who may not be able to obtain the same rate of wages, to return to this country without requiring them to pay the tax for the remainder of their industrial term.

Labour for railway in the Mauritius.

Artificers sent.

Present rate of wages in the Mauritius.

771. In the Appendix will be found a statement of the wages now obtained by labourers and artificers in the Mauritius. The rates for labourers, as there shown, were fixed by local ordinance for 1861, and were subsequently continued for 1862, with the exception of an increase of 1 *s.* a month in those of boys from 10 to 12.

Numbers dispatched.

772. The number of souls that left for the Mauritius during the year is 5,768, in 19 vessels, and to the West Indies (Demerara), 1,036, in three vessels, being in all 6,804. Arrival reports have been received of 14 of the Mauritius vessels, conveying 4,270 souls. In these, including the "Arethusa" and "Calliope," in which cholera in a malignant form broke out, and carried off 43 persons, the number of deaths was 71, thus averaging, even with this fearful and happily unusual loss in two vessels, under 1·7 per cent. of those embarked; a proportion which, it is believed, will be considerably reduced when official returns* have been received of the later vessels.

Proportion of deaths.

West India emigration.

773. Of the three ships which have left for Demerara, the arrival of one only has been announced. The health of the emigrants has been good during the voyage, which occupied 95 days, and only four deaths had occurred among the 576 souls embarked, one being that of an infant of four months.

The arrival of the "Henry Moore" at the same colony has also been reported. She left on the 8th March 1861, with 376 souls, and arrived on the 20th July, having lost seven persons on the passage, three of whom were children of two and three years of age, and one an infant five days' old.

Returns contrasted with returns of emigration to Réunion.

774. These returns contrast favourably with those of the French emigration from Calcutta to Réunion. Statements have been furnished by Her Majesty's Consul at that colony, showing that between the 26th January and 5th August 1861, 3,774 souls had arrived, in nine vessels, of whom 188 had died on the passage, being in the ratio of about 5 per cent. on the number embarked.

Restriction of number to 350.

775. The question of removing the restriction on the numbers allowed under the rules now in force to be embarked in one ship, viz., 350 statute passengers, has again been the subject of discussion, and the Emigration Commissioners desired their agent to increase the allotments with caution in large vessels; but the Government have not thought it desirable to disturb an arrangement which, in all probability, has contributed largely towards the healthiness of our ships.

State of depôts.

776. The depôts have been tolerably healthy, considering the amount of sickness that has prevailed in and about Madras during the year. In October the West India Depôt was established in Tondiarpett on the Trivatore high road; and on the 1st April the Mauritius Depôt was removed to a large enclosed space, also on one of the roads leading to Trivatore, where substantial pucka sheds, well raised and drained, had been erected for the accommodation of the emigrants.

Cholera.

777. The number of cholera cases which have occurred in the Mauritius Depôt has been 50, as shown in the following Table, of which 26 have been fatal. Considering the numbers occasionally congregated there, and the arrival of large parties after a journey

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* Reports of two vessels since received. One death only occurred among 576 souls embarked.

of 300, 400, and even 500 miles, worn out and bearing the germs of disease with them, this result cannot be looked upon but as favourable.

Month.	Number of Depôt.	Number of		Month.	Number of Depôt.	Number of	
		Cases.	Deaths.			Cases.	Deaths.
1861:				1861:			
May	40 to 440	–	–	December	350 to 530	7	4
June	170 to 470	7	5				
July	100 to 430	1	–	1862:			
August	150 to 360	3	3	January	100 to 300	8	3
September	50 to 350	2	1	February	200 to 300	–	–
October	50 to 350	1	1	March	100 to 380	19	9
November	150 to 500	3	–	April	100 to 280	–	–

In the West India Depôt the cholera cases were three, all of which were fatal.

Return emigrants.

778. The emigrants who have returned from the various Colonies are few, amounting only to 510 from the Mauritius, and 32 from Natal. The latter having only embarked in the year previous to that now under report had, of course, not served their industrial term; but as the climate appeared very unsuitable to them, and they were useless as labourers, the Colony sent them back.

French emigration from Madras.

779. Emigration from Madras to the French Colonies has not commenced, nor has it yet been introduced at Pondicherry under Act XLVI. of 1860. Rules have been prepared applicable to the operations on behalf of British as well as French Colonies; the convention entered into between the Governments of France and Great Britain providing that in all essential points the same advantages should be enjoyed by both countries, and it is not improbable that the limit of numbers to 350 statute passengers to each vessel, which is insisted on in respect to the British Emigration, may deter French vessels from making Madras one of their embarking ports. This restriction will not of course apply to the emigration from Pondicherry, which will be commenced on the 1st July next, under the surveillance of a consular agent, appointed on behalf of the British Government at a salary of 350 rupees a month.

From Pondicherry.

From Karikal.

780. At Karikal, the assistant collector of the Tanjore District will perform the duty of consular agent, when necessary.

Emigration to Ceylon.

781. The Ceylon Government have been desirous for some time of engaging emigrants in the northern districts on three years' contracts for service in that Colony. Formerly all their labour was obtained from Tanjore, Madura, and Tinnevelly, an ablebodied man obtaining sixpence or four annas a day; but of late labour has increased in value to such an extent that the same men will no longer cross over to Ceylon for the old rates of remuneration. The planters therefore sought a new field for recruiting their labour market, and selected Ganjam. Strong objections, however, existed to natives being bound under a three years' contract in a place where no proper supervision could be exercised over the engaging agents; and it has now been decided that they shall be landed in Ceylon free to make their own terms.

Proposed alterations in rules.

782. The alterations proposed during the past year in the Emigration Rules, are not such as to promote the satisfactory working of emigration from this part of India.

> 1st. The increase of the numbers in one ship beyond 350 statute passengers is most likely to be attended with unfavourable results, as it is well known that cholera and small-pox are generally more virulent and less readily subdued when the numbers congregated together are large, whether in depôt or on board-ship.
>
> 2d. The limit of 60 cubic feet in French vessels to each adult, in lieu of 72 as in the British emigration, without insisting on any particular amount of deck space, is also likely to be injurious to the emigrant.
>
> 3d. It is contemplated to pay agents for some of the Colonies by head-money, not by salary, which will have the effect of making it their interest to procure emigrants without troubling themselves as to the means by which they have been obtained.

Fee fund.

783. On the 1st January 1861, a fee of one rupee was ordered to be levied on all male adults embarked for any Colony, in order that a fund might be formed wherewith to meet the expenses of the protectorate. The amount received on this account is 4,334 rupees, while the expenses have been 4,640 rupees.

PRESIDENCY MUNICIPALITY.

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784. The following is the statement of the income and expenditure of the Municipal Fund during the year 1861.

The balance on the 31st December 1860, as shown in the Statement attached to our last annual Report, was—

	Rs.	*a.*	*p.*
Cash with the Bank of Madras	11,552	3	7
Cash with the Storekeeper and Cashkeeper	250	–	–
Invested in Government Securities	61,000	–	–
Arrears of Assessment	42,064	13	2
Arrears of Wheel Tax	10,899	10	–
Advances recoverable from Contractors, &c.	7,780	7	9
Advances to be adjusted on completion of Works	55,828	10	11
Office Premises	21,000	–	–
Lamp Posts, &c.	2,000	–	–
	2,12,375	13	5
Less Sums in Deposit and Suspense	6,386	13	5
	2,05,989	–	–
Deduct Amount transferred to account of unclaimed Salaries, &c.	240	2	6
Total - - - *Rs.*	2,05,748	13	6

The income of the past year was—

	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*
Assessment, 1861	1,41,115	14	7			
Wheel Tax, 1861	39,931	4	–			
Ditto 1860 (4th Quarter)	13,899	8	–			
Warrant fees	1,068	2	11			
License fees	744	–	–			
Fines	789	5	6			
Interest	2,539	13	4			
Slaughter-house fees	6,706	8	6			
Rubbish sales	3,906	5	–			
Proceeds of ground and buildings	13,314	14	7			
Sale of lamp posts, &c.	465	12	7			
Miscellaneous receipts	445	2	3			
Government contributions on account of roads and works	52,300	1	11			
				2,77,226	13	2
Total Income - - - *Rs.*				4,82,975	10	8

785. Of the arrears and current demand of assessment, aggregating *Rs.* 1,83,180. 11. 9. as per Statement B, the collections during the past year were as follows:—

Collection of assessment.

Old Arrears.			Arrears of 1860.			Current.			Total.		
Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
2,381	–	3	31,777	13	1	1,05,765	9	3	1,39,924	6	7

being *Rs.* 2,268. 6. 6. less than the amount collected in the previous year. This difference is owing to the smaller amount of arrears outstanding at the commencement of 1860, viz., *Rs.* 42,064. 13. 2. as compared with those outstanding at the same period in the previous year, viz., *Rs.* 49,874. 9. 2.

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The collection of the current assessment was rather larger in 1861 than in 1860, being *Rs.* 1,05,765. 9. 3., against *Rs.* 1,03,383. –. 2.

Remissions of assessment.

786. These amounted to *Rs.* 3,276. 10. 10., against *Rs.* 4,968. 12. 11. in 1860, and included the irrecoverable arrears from 1852 to 1856, which were written off in accordance with the recommendation of Government in their Order dated 20th October 1860, No. 1,529.

Balance of assessment.

787. The outstandings on the 31st December 1861, were as follows:—

Old Arrears.				Arrears of 1860.				Current.				Total.		
Rs.	*a.*	*p.*		*Rs.*	*a.*	*p.*		*Rs.*	*a.*	*p.*		*Rs.*	*a.*	*p.*
2,188	8	3	- -	2,440	12	9	- -	35,350	5	4	- -	39,979	10	4

being *Rs.* 2,085. 2. 10. below the balance on 31st December 1860; and of these arrears, *Rs.* 19,898. 11. had been collected up to 31st March last.

Wheel tax.

788. The collections of this tax in last year were as follows:

	Arrears of 1858–59.			Arrears of 1860.			Current.			Total.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
On spring vehicles and animals -	117	12	–	15,712	2	–	26,550	1	–	42,379	15	–
On carts - - - - - -	46	8	–	3,672	8	–	4,996	8	–	8,715	8	–
Total - - - *Rs.*	164	4	–	19,384	10	–	31,546	9	–	51,095	7	–

being *Rs.* 1,843. 12. above the sum collected in 1860.

Remissions of wheel tax.

789. These were as under—

	Rs.	*a.*	*p.*		*Rs.*	*a.*	*p.*	
On spring vehicles and animals,	1,911	11	–	against	1,869	3	–	in 1860.
On carts - - - -	874	8	–	ditto	522	–	–	„
Total - - - *Rs.*	2,786	3	–	- -	2,391	3	–	

including the irrecoverable arrears of 1858, which have been written off.

Balance of wheel tax.

790. The outstandings on 31st December 1861 were as follows:—

	Arrears of 1859.			Arrears of 1860.			Current.			Total.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
On spring vehicles and animals -	648	12	–	880	12	–	5,526	8	–	7,056	–	–
On carts - - - - - -	647	4	–	1,098	–	–	2,047	8	–	3,792	12	–
Total - - - *Rs.*	1,296	–	–	1,978	12	–	7,574	–	–	10,848	12	–

against *Rs.* 10,899. 10. on the 31st December 1860, and of this balance *Rs.* 3,697. 8. had been got in up to 31st March last.

The sums realised by sale of ground and buildings, together with the contributions from Government on account of roads and works have been included under the head of income, instead of deducting the same from the items of expenditure of a similar nature, as in previous annual statements, as rendering the account more complete, and at the same time more clear. These receipts are exhibited in detail, and require therefore no special notice here.

791. The

Expenditure.

791. The following Statement shows the disbursements in the past year as compared with those of the preceding year, the former amounting to *Rs.* 3,51,492. 5. 9., and the latter to *Rs.* 3,71,462. 3.—

	1861.				1860.		
	Rs.	*a.*	*p.*		*Rs.*	*a.*	*p.*
Assessment Department	7,869	13	11	Against	8,654	6	–
Assessor's ditto	2,019	8	–		1,993	7	10
Books, maps, and other publications	39	7	8		60	11	2
Burial and burning-grounds	7,547	4	1		160	7	1
Ditto ditto charges	699	2	9		—		
Civil Engineer's Department	7,735	11	5		7,092	10	–
Compensations, law, and other charges	76	8	–		117	8	–
Conservancy Department	3,024	13	7		4,335	12	2
Flushing drains	553	12	5		177	3	3
Government works	3,497	2	–		—		
Income tax and Stamp duty	101	8	–		135	7	2
Interest	4,751	4	9		—		
Lighting	7,154	7	4		5,007	7	–
Mortuary Department	906	–	–		891	2	–
Municipal ditto	21,951	12	3		26,659	7	8
Office furniture	35	11	4		59	3	4
Ditto premises	138	14	3		2,476	5	7
Plant	-	-	-		4,208	1	–
Refunds of assessment	15	–	–		—		
Ditto wheel-tax	2	4	–		—		
Remission of assessment	3,270	6	2		—		
Ditto wheel-tax	2,786	3	–		—		
Road Department	4,818	–	–		4,748	8	–
Ditto work	1,02,648	4	8		1,01,840	8	11
Ditto (advances)	-	-	-		11,521	3	8
Petty ditto	-	-	-		4,337	7	9
Scavenging Department	63,238	9	1		59,015	1	7
Slaughter-houses' charges	2,928	13	5		1,353	8	10
Stationery	987	3	1		1,015	15	11
Sums recoverable	1,690	15	11		—		
Trevelyan waterworks	58,565	10	1		21,122	6	1
Ditto ditto charges	3,601	–	5		—		
Advances on account of Trevelyan waterworks	-	-	-		39,790	10	9
Watering	1,804	5	6		1,276	–	–
Wheel-tax Department	5,268	14	9		5,481	4	5
Works, drain and other	-	-	-		49,970	7	4
Advances on account of ditto	-	-	-		7,959	12	6
Works, improvements to	4,526	10	1		—		
Ditto new	21,635	14	8		—		
Ditto repairs to	5,601	5	2		—		
Rs.	3,51,492	5	9		3,71,462	3	–

The disbursements are sub-divided in the balance sheet under separate heads, so as to show the expense of supervision and management as distinguished from repairs, improvements, and other operations of the department.

The increase under the head of burial and burning-grounds is owing to the enlargement of the new ground at the Mint esplanade to afford accommodation to the Brahmin, Goldsmith, and Chetty castes, whose burning-places at Royapooram have been suppressed; and also to the levelling and raising of the new burial-ground for Christians and Mahomedans at Washermanspettah.

The increase under the head of lighting is owing to the larger number of street lamps in last year, viz., 460 against 431 in 1860; and also to the higher rates paid for oil. With the exception of the Civil Engineer's Department, the expenditure in all other establishments, viz., Conservancy, Municipal and Wheel-tax Departments, was lower in last year than in the previous one, and the increase in the first-named department was owing to the civil engineer's salary being raised, with the sanction of Government, from 400 rupees to 500 rupees per mensem, in May last.

The remissions of Assessment and Wheel-tax, and also the interest on bank loans and discount on Government Securities disposed of, have been included in the disbursements.

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Roads.

792. The particulars of expenditure under the head of Roads are as follow:—

	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*
NEW ROADS.						
Road leading from Pantheon-road to Pursewaukum - -	596	5	6			
Between Hunter's-road and Vautear Cundapillay-street, Choolay - - - - - - - - -	541	8	4			
Roads connected with the Trevelyan waterworks - -	350	–	–			
Between Thadamoottiapen-street and Popham's Broadway -	331	–	–			
Road leading from Satana Naick-street to Choolay slaughter-house - - - - - - - - - - -	221	6	–			
Between Coral merchant and Ramasawmy-streets - -	117	8	–			
Between Popham's Broadway and Ramasawmy-street - -	104	11	9			
				2,262	7	7
IMPROVEMENTS TO ROADS.						
Widening Pycroft's-road, Triplicane - - - - - -	13,885	8	5			
Certain minor improvements - - - - - - -	497	12	2			
Widening Veeraragava Moodelly-street, Triplicane - -	348	4	8			
Widening and improving Vadavenoyager-road, Pursewaukum - - - - - - - - - -	162	9	10			
Widening the turn between Saulay and Moottiapen-street, Black Town - - - - - - - - -	125	–	–			
Improving St. Thomé high-road - - - - - -	108	14	10			
Ditto - Condey Chetty-street, Black Town - - -	100	–	–			
Ditto - Cutcherry-road, Mylapoor - - - -	80	–	–			
Ditto - Puttooloo-road, Poodoopauk - - - -	47	2	–			
Levelling Vencatasa Moodelly-street, Triplicane - -	44	11	–			
				15,399	14	11
Repairs of roads - - - - - - - - - - - -				84,985	14	2
TOTAL - - *Rs.*				1,02,648	4	8

The principal item specified above will be noticed hereafter under the head of "Improvements."

The repair of roads aggregated *Rs.* 84,985. 14. 2., against *Rs.* 98,222. 2. 5. in the previous year.

ABSTRACT.—ROAD WORK.

DESCRIPTION OF WORK.	Laterite.					Granite.				
	Mileage.			No. of Squares executed.	No. of Cubic Feet of Work.	Mileage.			No. of Squares executed.	No. of Cub. Feet of Work.
	M.	F.	Y.			M.	F.	Y.		
Reforms - - - - - - - -	22	4	104	20,109	750,876	4	0	29	2,303	68,943
Repairs - - - - - - - -	10	2	218	4,394	85,760	4	5	17	1,900	31,664
Emergent repairs - - - - -	93	3	72	16,000	266,666	—			—	—
Total - - -	126	2	174	40,503	1,103,302	8	5	46	4,203	100,607
Total Laterite - -	126	2	174	40,503	1,103,302					
Total Granite - -	8	5	46	4,203	100,607					
Total for both - -	135	–	–	44,706	1,203,909					
Raising and reforming mud roads - - -	-	-	-	- -	238,083					
Cutting ditches, making banks, turfing, &c., in main roads - - - - - -	Turfing,		S.	4,562	358,093					
Brick-jelly roads - - - - - - -	-	-	-	- -	3‘600					
Removal of prickly-pear - - - - -	-	-	S.	395	—					
Levelling rubbish depôt - - - - -	-	-	S.	500	—					
Repairs to teakwood railings - - - -	-		R. ft.	30	—					
Earthwork, Total - - - - - -				5,487	599,776					

Twenty-two miles, 4 furlongs, 104 yards of roads were reformed with laterite; 4 miles and 29 yards with granite; and 15 miles and 15 yards were partially repaired, the work being performed on contract. About 94 miles were maintained by daily coolies, under the supervision of the office maistries and conicopolies.

The

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The total quantity of work executed during the past and preceding year is as follows:—

	1861.		1860.	
	Squares.	*Cubic Feet.*	*Squares.*	*Cubic Feet.*
Reforms	22,412	819,819	18,309	610,902
Partial repairs	6,294	117,424	14,332	200,708
Emergent repairs	16,000	266,666	14,000	200,000
Total	44,706	1,203,909	46,641	1,011,610

The cost per mile of reformed roads is *Rs.* 2,097. 7.; of roads partially repaired *Rs.* 542. 10. 8.; and of roads repaired under office supervision (emergent) *Rs.* 165. 2. 8. The average outlay per mile for all roads repaired and reformed during the year is *Rs.* 587. 7. 3.; in this is not included the amount expended in embankments, cutting ditches, and the like.

Masonry works, drain and other.

793. The particulars of the expenditure under this head are as follow:—

		Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*
Drains	Black Town	3,059	7	11			
	Choolay	2,701	8	–			
	Vepery	832	2	–			
	Wall-tax-road	552	5	6			
	Mount-road	339	2	10			
	Perambore	276	8	6			
	Poodoopaukum	125	6	6			
	General Patter's road	77	3	6			
	Mylapore	56	13	9			
	St. Thomé	49	4	10			
					8,069	15	4
Latrines	Wall-tax-road	2,899	13	–			
	Cosspetta	962	14	10			
	Causimodoo	819	9	10			
	Egmore	602	14	–			
	Pursewaukum	126	2	8			
	Petty charges	5	7	6			
					5,416	13	10
Drainage pipes and coolie hire		–	–	–	2,827	5	4
Side Channels	Poodoopaukum	560	1	6			
	Egmore	377	4	6			
	Triplicane	228	8	–			
	Black Town	217	6	8			
	Washerman-pettah	193	12	8			
	Royapooram	188	12	–			
	Choolay	75	12	8			
	Pursewaukum	38	4	8			
					1,879	14	8
Wells, cisterns, &c.	Black Town	903	5	6			
	Eroongoonum	200	–	–			
	Koorookoo-pettah	199	6	–			
	Meersahib-pettah	48	9	6			
	Poodoopaukum	43	7	10			
					1,394	12	10
Dust boxes	Black Town	632	13	–			
	Chintadrepettah	212	4	4			
					845	1	4
Retaining walls	Black Town	364	2	1			
	Poodoopaukum	140	10	–			
					504	12	1
Slaughter-houses	Monegar Choultry	262	14	–			
	Triplicane	190	14	–			
					453	12	–
Sundries					259	13	3
					21,652	4	8
Deduct amount realized by the sale of materials of houses, &c., purchased					16	6	–
					21,635	14	8
Improvements of works					4,526	10	1
Repairs of works					5,601	5	2
				Total - - - *Rs.*	31,763	13	11

against *Rs.* 55,713. 2. 10. in the previous year.

The expenditure on drains, side channels, slaughter houses, and retaining walls was considerably below that of 1860; whilst on latrines it was nearly doubled. Eight new ones were constructed, and 13 old ones were repaired in last year.

The total quantity of masonry work executed during the past year was 159,330 cubic feet, and of plastering 103,049 square feet.

Government has repaid the Board the outlay incurred in constructing drains across a portion of the east bank of the canal between the Hospital and Elephant-gate bridges, amounting to 5,580 rupees, and has sanctioned an estimate amounting to *Rs.* 10,007. 9. for five egg-shaped masonry drains, with stone-ware pipes laid down in their beds, to be constructed across the remaining portion of the said ground, by which the sewage as well as the surface drainage of the south-western section of Black Town will be carried to the canal.

Improvements.

794. In August last the surgeon of the 1st District brought to notice the overcrowded state of the boatmen's huts on the Royapooram beach, which rendered them not only most unhealthy to the boatmen themselves, but also a nuisance, and the source of disease to the residents of the neighbouring locality, and recommended their removal to a spot further north, and the construction of a road on the sea-face of Royapooram.

As these people had been but a few years back removed from the Northern Esplanade to make room for the railway terminus, and as their present abodes are at some distance from the scene of their daily avocations, the first proposition could not be entertained; but, as a middle course, it was recommended that broad streets should be made from east to west through the existing blocks of huts, and a road be constructed along the beach between the huts and the sea, the cost of which was estimated at 10,770 rupees.

Government were pleased to sanction the same, and the work is now in progress.

The improvements of Condey Chetty-street, which were commenced in the year 1860, were completed in the past year. The north end of the street, which was very narrow, and by which it was dangerous to drive, particularly at night, was considerably widened, and the abrupt turn removed by throwing back the Right Rev. Dr. Fennelly's stables. The steps leading to the Roman Catholic Cathedral were also thrown back, and the verandah, which projected into the street at the south end, was removed. The cost of these improvements, deducting the value of materials sold, was *Rs.* 689. 7. 9.

A house and piece of ground for improving the turn at the north end of Veeraragava Moodelly-street, Triplicane, at its junction with Masoody-street, was purchased at an expense of *Rs.* 348. 4. 8.

The residents of Vautear Cundapillay and other streets in Choolay were subjected to great inconvenience, whenever they had occasion to go to the bazaars and market, there being no direct communication from that locality to the main road. A road has now been opened out from the north end of Vautear Cundapillay-street to Hunter's Road. Besides the great benefit the residents of the neighbourhood derive from this communication, it has been also found very convenient to the Scavenging Department, the rubbish carts now having a direct communication to the rubbish depôts in Pursewaulkum. The cost of this road is *Rs.* 410. 8.

The turns of the roads near General Neill's statue were very much improved; but with the exception of the metalling of roads, which cost *Rs.* 357. 2., the expense was borne by the Neill Statue Committee.

The St. Thomé Road near the Protestant Church was improved very much by throwing back a portion of the burial-ground wall which projected into the road. The cost of removing the old wall and building a new one, &c., was *Rs.* 266. 2. 2., of which the Commissioners paid *Rs.* 177. 6. 10.

The following improvements are in progress:—

A sum of 2,000 rupees was sanctioned for the removal of projections in Annah Pillay-street, of which 745 rupees have been laid out; owing to want of time the purchase of the ground and houses required for widening the road has progressed but slowly during the past year: it, however, is hoped that the work will be completed in the current year.

Several complaints having been made by the residents of that portion of Triplicane lying at the back of Lowe's shop on the Mount Road, of the stench arising from the covered drain running through that locality, and Dr. Balfour having brought the matter prominently to the notice of the Board, it was resolved to open out a passage to the extent of seven feet on each side of the drain, by the removal of the huts which were erected on and near it. The huts have been all removed and paid for, only a portion of the ground has not as yet been purchased, owing to the difficulty of coming to terms with the owners. The amount sanctioned for this work is 2,250 rupees.

The extension of Pycroft's Road from Triplicane to Royapettah was commenced upon, in last year, and would by this date have progressed far towards completion, but for the delay attending the taking of several pieces of land, which are in dispute, under the Provisions of Act VI. of 1857.

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Trevelyan waterworks.

795. The amount expended in construction of these works in last year, was *Rs.* 58,565. 10. 1., which, with the amount charged in the accounts for 1860, *Rs.* 21,122. 6. 1., brings the total cost up to *Rs.* 79,688. 0. 2., or a trifle under the civil engineer's estimate appended to our last report.

Much delay has occurred in bringing the works into active operation: firstly, in consequence of the non-arrival of the engine promised by the late Governor, his Excellency Sir Charles Trevelyan, and the very incomplete condition in which the engine purchased as a temporary substitute was delivered, which rendered it necessary to have a number of fittings cast at the Mint; and secondly, to the failure of the civil engineer's attempts to puddle with clay the floor of the large cistern, owing to the porous character of the soil on which it is erected, and which has obliged us to adopt the expensive process of flooring it with masonry. This is now completed, and it is expected before this report comes under review, the drains of the south-western slopes of Black Town will be flushed daily, and the southern portion of the main drain be scoured once or twice a week.

The entire success of this undertaking cannot, however, until a more powerful and efficient engine than that now at work is set up, be looked for. The Board were, in the first instance, led to believe that one would be furnished by Government, and in their report bring the point prominently to notice.

Scavenging.

796. The particulars of the expenditure under this head, as compared with that of 1860, were as follow :—

	1861.				1860.		
	Rs.	*a.*	*p.*		*Rs.*	*a.*	*p.*
Wages of establishment -	27,129	7	–	Against	27,208	12	4
Hire of bullocks - - -	33,769	4	8		29,199	3	9
Extras and Contingencies -	520	8	3		1,812	2	5
Repair of carts - - -	1,360	1	10		794	15	1
Do. of Depôts - - -	459	3	4		—		
Total - - -	63,238	9	1		59,015	1	7

The increase in the charge for bullocks is owing to the higher rate having been paid for the entire year of 1861, against only five months in 1860.

Burial and burning grounds.

797. In the last report, allusion was made to a proposal submitted to Government to convert the late Veteran Battalion Lines at Washerpet into a cemetery for all such classes of the community as had places of sepulture within the walls of Black Town; and it was subsequently proposed to suppress also the greater portion of the numerous burial and burning grounds at Royapooram and Tondiarpet. The measure was duly sanctioned by Government, and they further granted the large sum of 10,310 rupees to defray the cost of enclosing the new cemetery with a wall, and of erecting vestry-rooms for the several denominations to whose use it is allotted.

The number of *intramural* burial-grounds that were closed was 15, and of *extramural*, 23.

The Armenian community solicited that a piece of ground at a less distance from their abodes, which were found to be chiefly in the western and southern suburbs, might be allotted to them, and Government were pleased to give a portion of the Wallajah Esplanade near Saint Mary's cemetery for their use, and another immediately adjoining for the use of the congregation of the Roman Catholic Chapel at Pantheon Road, the suppression of which had been frequently urged upon the Board by the inhabitants of that locality. Government further granted the sum of 3,900 rupees to defray the cost of enclosing the said grounds.

A number of private burial and burning grounds exist at Tondiarpet, which are only used when a death occurs in the family of the proprietors, and as it was considered that these come within the provisions of Section CVIII. of Act. XIV. of 1856, their further use has not been prohibited. Objection has been made by the surgeon of the district to the spot selected near Barber's Bridge as a cemetery for the Christian inhabitants at Mylapore, and no fresh site has yet been allotted for the purpose. The Board adhere to their opinion that the original site is as unobjectionable as any to be found within a reasonable distance, but the Venerable the Archdeacon, who is chaplain of Saint Thomé, inclines to the same opinion as the medical officer of the district, and is, we learn, in communication with Government on the subject.

Mortuary registration.

The number of deaths reported in last year was as follows :—

	Males.	*Females.*	*Children.*	*Total.*
	3,157	3,024	4,421	10,602
against	3,958	4,128	5,412	13,498 in 1860.

The number of cholera cases was, however, rather larger than in the previous year, viz., 2,776 against 2,576.

Sanitary condition of the town.

798. On this head it is not necessary to enter into much detail, as Government will receive full reports of the public health from the medical officers of the several districts.

Epidemics prevailed during portions of the past year, chiefly amongst the poorer classes, the situation of whose dwellings and their uncleanly habits render them peculiarly liable to such visitations.

Whenever the medical authorities have given any information, or made any suggestion relative to the sanitary condition of any locality, the Board have afforded assistance to the full extent of their means. During the prevalence of disease the scavenging establishment was strengthened, and instructions in as plain a form as possible were furnished to householders to enable them to co-operate with our servants in cleansing their premises and neighbourhood, and in many instances the people were found to take a lively interest in these useful operations, and fully to appreciate their value.

All the burial-grounds within the town and many of those in the suburbs have been closed. But there are still certain nuisances and undoubted sources of disease, which we cannot touch. Thus, for instance, there are numerous large tanneries, brick and lime kilns, and soap and oil-boiling establishments situated in the heart of the city and thickly populated suburbs, which existed before the passing of the Municipal Act, and are shielded by that circumstance from interference. A proposal will shortly be submitted for the amendment of Act XIV. of 1856, which will enable the Board to check or remove these and other similar offensive and dangerous occupations, whenever there is undoubted proof that injury and annoyance are caused to the inhabitants in their vicinity.

Drainage and water supply.

799. On the 15th October last the Municipal Commissioners addressed the Government on the important subjects of drainage and water supply; pointing out the insufficiency of the municipal funds to meet the daily increasing demands in the ordinary branches of their expenditure, and the impossibility of the Board's attempting to make even a beginning in either the re-construction of the drainage, or the obtaining of a sufficient supply of pure and wholesome water for the use of the inhabitants of so large a city as Madras.

A precis was also submitted of various projects for drainage and water supply, and the Board recommended a modification of Captain O'Connell's project for drawing water from the Red Hill and Pommel tanks at an outlay of 15 lacs for the original works, and 40,000 rupees per annum for working expenses.

It was also proposed that an addition of 10 per cent. on the Abkarry-tax should be levied for municipal purposes, that the rent now derived from the public market and certain lands used as cart stands, wood depôts, kilns, &c., should be assigned to the Board, and that the assessment on houses, buildings, and lands should be raised to the maximum allowed by law, viz., 7½ per cent., on the understanding that nothing additional should be charged for water. With these additions it was calculated that the municipal revenue would be raised to above 3½ lacs of rupees.

It was calculated that, with a sinking fund of 50,000 rupees per annum, the Board would in thirty years clear off more than 6¾ lacs, with interest at 6 per cent., or somewhat less than the probable cost of the Red Hill water-supply scheme; but the Commissioners could make no provision for the Southern or Pommel-tank scheme.

Finally, they asked that the balance of the Black Town Esplanade Fund, 90,000 rupees, which has remained unclaimed for a long series of years, should be handed over to them, and suggested that if this were granted, the increase of the house assessment might be deferred for another year.

The Government agreed that the two great desiderata for Madras are a good system of drainage and a constant supply of water, and that attention should first and chiefly be devoted to the latter of these questions; that of drainage being regarded as quite subservient and supplementary, to be disposed of by gradual and progressive modification and extension. They could not, however, allow the execution and control of such important works to pass out of their own hands, nor could they by any means concur in the opinion expressed by the Board, that a special water-rate in addition to the 7½ per cent. house assessment, ought not at any time to be imposed at Madras.

Government referred the whole question to the Public Works Department, in view to practical measures being at once adopted, and a commencement will shortly be made on both the Southern and Northern projects.

The several proposals made by the Board for the increase of their income did not find favour, but Government at once recognised the necessity of increasing the house assessment to 7½ per cent., to provide for the ordinary work of the department; and subsequently they resolved to bring the entire question of the financial condition of the Madras municipality under the consideration of the Government of India, and to recommend that a grant of a lac of rupees annually be made by the State in aid of the municipal resources.

19 March 1862, No. 352.

Rubbish.

800. The Principal Inspector General, Medical Department, brought to the notice of Government in September last the many evils attending the system of depositing the sweepings of the streets in the neighbourhood of dwellings, and recommended that a tramway should be laid down from every populous neighbourhood, and from each quarter, north, south,

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south, and west, converging into two or three main ways, going out to places sufficiently remote; that to the north, for instance, to the Red Hills, at which place the rubbish would be most useful for manure, the return waggons bringing in laterite for road-work; and that to the south, across the Adyar towards Guindy. Government requested the Board to report on the practicability and probable expense of the remedial measures proposed by Mr. Cole, and at the same time stated they had applied to the Supreme Government for permission to expend on sanitary improvements at Madras a portion of the one per cent. Income-tax expressly levied for public works.

The Board accordingly submitted to Government two plans of a tramway between Madras and the Red Hills, one costing 1,26,000 rupees, and the other 1,05,000 rupees, with an annual charge for repairs of 15 to 20 per cent. on the first outlay, based on data furnished by officers of the Department of Public Works; and at the same time mentioned that the firm of Knight & Co., of Calcutta, offered to lay down a tramway at 8,000 rupees per mile; but even at this rate a tramway of only five miles, with waggons, &c., would cost half a lac of rupees. Considering the large outlay that would be incurred in the first instance, and the heavy annual charges for repairs, the Board could not recommend the adoption of Mr. Cole's scheme, and therefore endeavoured to come to an arrangement with the Madras Railway for the removal of the town rubbish; but the terms asked were so high, though not excessive or unreasonable, viz., 100 rupees per diem or 36,500 rupees per annum, that this idea also was abandoned. The only method left was to convey the rubbish by boats on Cochrane's Canal to a cut excavated for the purpose some two years back near the Manally bridge, which involved an outlay of 2,500 rupees for boats and platforms, and a monthly working charge of about 350 rupees.

The Board, however, pointed out that this plan would only apply to the sweepings of Black Town and such portions of the suburbs as are within easy reach of the Cooum and Cochrane's Canal; for the southern and western districts, the present practice must be continued, unless Government would give assistance with funds for the construction and maintenance of tramways.

Government observed that the cost of the tramway, which after all would only be available for the removal of the sweepings of Black Town and its immediate vicinity, must place its adoption out of the question. They approved therefore of the Board's design to resort once more to the canal as a means of carrying off the town rubbish.

Financial Estimate for 1862.

801. The balance of last year's account to be carried to the credit of the Fund in 1862, was as follows:—

	Rs. *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*
1st. Cash with the Bank of Madras - -	15,290 1 11		
„ with Store Conicopoly - -	150 – –		
„ with Cashkeeper - - -	100 – –		
		15,540 1 11	
2nd. Invested in Government Securities -	- - -	37,300 – –	
3rd. Arrears of Assessment recoverable from Rate payers - - - -	- - -	39,979 10 4	
4th. Arrears of Wheel Tax do. - -	- - -	10,848 12 –	
5th. Advances recoverable from Contractors and others - - - -	- - -	5,510 13 5	
6th. Office Premises - - - -	- - -	21,000 – –	
7th. Lamp Posts, &c. - - - -	- - -	3,000 – –	
			1,33,179 5 8
Less amount of unclaimed saleries, &c. -	- - -	343 2 7	
Amount of deposit—Avenue Fund -	844 5 9		
„ Income Tax deposit - -	506 4 7		
„ Assessment received in excess -	2 3 10		
		1,352 14 2	
			1,696 – 9
	Total - -	- *Rs.*	1,31,483 4 11

The three last of these items cannot be considered available; and of the remaining four, only the first entirely so, the value of Government Securities being uncertain, and the arrears of rates and taxes not likely to be collected in full.

The available income of the current year 1862, may be estimated as follows:—

		Rs.
Cash Balance - - - - - - - -		15,290
Government Securities, &c. - - - -	37,300	
Less 6 per cent. discount - - - -	2,838	
		34,462
Carried forward		49,752

	Rs.
Brought forward - - - -	49,752
Collections of assessment, current (7½ per cent.) and arrears (5 per cent.) - - - - - - - - -	1,80,000
Collection of wheel-tax - - - - - - - -	50,000
Government contributions for roads - - - -	27,397
Sale of rubbish - - - - - - - -	3,900
Slaughter-house fees - - - - - - -	6,700
Total - - - -	Rs. 3,17,749

which it is proposed to apportion thus:—

	Rs.
Charges for management and supervision - - - -	57,000
Scavenging establishment and hire of bullocks - -	65,000
Lighting charges and establishment - - - - -	10,000
Road work - - - - - - - - - -	1,01,099
Masonry work - - - - - - - - -	30,000
Improvements - - - - - - - - -	18,000
Reserve for water supply - - - - - -	30,000
Flooring Trevelyan cistern - - - - - -	6,650
Total - - -	Rs. 3,17,749

OBSERVATORY.

802. The proceedings of the Madras Observatory have been so interrupted by repairs of the principal instruments during the past official year, that the actual scientific results are comparatively insignificant. The nature of the works accomplished, and the present condition of the Observatory, may be described as follows.

The new Transit Circle.

803. This fine instrument is at last mounted, and in regular use. It would most certainly have been finished long since, though in a far less efficient manner than it now is, but for the following reason:—When vigorously attempting its completion, a work infinitely more difficult than the entire erection of a new instrument judiciously commenced, intimation was afforded by Government of the appointment of Mr. F. Doderet, a German, as mathematical instrument maker to the Department of Public Works. The transfer of his services was immediately applied for, and as readily granted; but from some cause or other it was not until the end of November that he entered upon the rather arduous task awaiting him at the Observatory. Much time was unavoidably spent in fitting up a workshop, in procuring some of the requisite tools from the Arsenal, and in making many others, not obtainable from thence or from any other available source. Since December, the general repairs have been steadily and perseveringly carried out by Mr. Doderet, under the astronomer's directions; and, notwithstanding that he has spared neither time nor labour, working early and late, in a manner few similarly situated would have done in England, and far less in a tropical climate, so extensive were the alterations required, that it is only within the last few days that the transit circle has been sufficiently advanced, to be reported as in actual use.

The details of its construction, and of the alterations required to rectify the grave errors previously made in futile attempts at mounting it, will appear more appropriately in a preface to the published Observations, when sufficient have been collected and reduced to form the first volume of a new series of Madras Observatory Records, than in an annual report. It may, however, be briefly stated, that, while the instrument is perfectly steady in all its parts, it is not permanently built in, according to the plan in progress, when the present astronomer assumed charge of the Observatory; but can at any time be readily lifted out, for future repairs or cleansing, should occasion require. It was originally provided by Messrs. Simms with six equidistant microscopes, but in consequence of various oversights in the cutting of the piers, five only were intended to have been retained. Although the combination of five equidistant microscopes may be little, if at all inferior to that of six, the latter number is far preferable, as it admits of the use of a single opposite pair, should zoning or other special purpose render rapidity of observation a paramount consideration in the application of the instrument. A seventh has also been added, moveable through an arc of sixty degrees, for the express purpose of examining the errors of division of the circle.

It is not, however, intended to commence this laborious investigation until the arrears of publication are considerably diminished, and the Variable Star Atlas, now in hand, completed; meanwhile, there is no reason to suppose that the Madras meridian circle is in any respect less accurate than its well-known counterpart formerly at Red Hill, but now at the Radcliffe Observatory, Oxford; or even than the larger circles now in use at Greenwich, and at the Cape of Good Hope; all of which having been divided by the same eminent makers, upon the same engine, are doubtless as nearly as can be *fac similes* of each other, and all equally perfect.

Intended meridional pursuits.

804. The meridian circle will be employed first, upon the determination of the positions of comparison stars already used in the Equatoreal observations; for continuous observation of the minor planets near opposition; for observations of certain selected standard stars by direct and reflected vision, and of the moon and moon-culminating stars, for the correction of the assumed latitude and longitude; and of such other objects as circumstances may render worthy of insertion in the ordinary working list.

The Madras Time Ball.

805. This useful adjunct of the Madras transit instrument, so important to the marine service in particular, and of interest to the public in general, has been far less successful during the last four, than for the previous 11 months; while in 1861, the failures amounted only to about 5½ per cent. of the signals given, they have, since January 1st, exceeded 11 per cent. It is now under consideration of Government to place the machinery entirely in the hands of the astronomer, so as to do away with the present very objectionable system of divided responsibility. All the failures which have hitherto occurred have been solely telegraphic; the signals from the Observatory having been most scrupulously transmitted throughout by the astronomer himself, with very few exceptions.

The Equatoreal by Lerebours.

806. The renovation of this instrument was the first point to which Mr. Doderet directed his endeavours, and although it was impossible to render its inconvenient mounting either good or steady, it has been thoroughly cleaned, supplied with a new declination clamp and tangent screw, with reading lenses to its small indistinct circles, an entirely new neck, some useful adapters for fitting on eye-pieces borrowed from other telescopes, and a steel ring-micrometer. Altogether it is worth as much now as when new, but without its recent additions. It is, however, an unworthy make-shift for the chief observatory in India.

Objects of research therewith.

807. The objects observed with it have been, 11 of the minor planets, distributed over about 50 nights; the Great Comet of 1861, in 13 nights, between July 3d October 8th; Encke's comet of short period; the solar eclipse of July 7th; the transit of Mercury; and the Double Star *a* Centauri, which has been measured with the crystal prism micrometer of the Hartwell Observatory, kindly lent by its owner, Dr. Lee. The main pursuits have, however, consisted of observations of small stars, in short zones, for a Variable Star Atlas now in course of construction; and of continuous comparisons of such of the variable stars as are professedly under determination, in regard to their epochs of maximum and minimum brilliancy, and duration of period.

Accidental injury since recent repairs.

808. No sooner were the repairs of this instrument concluded, than while in use, on a moderately windy night, one of the eight shutters of the inconvenient and dangerous folding roof of the Equatoreal room blew over on to the telescope, breaking off the new neck, but fortunately doing no further damage than could be repaired in the three following days. Accidents of a similar nature will be prevented as soon as the new Equatoreal room with revolving dome, now in hand by the Engineer Department, is completed. The consequences might have been most serious both to the instrument and to the astronomer; and this is an accident ever imminent, unless work is neglected on all except nearly calm nights. It is therefore earnestly to be desired that the new Equatoreal room, with revolving dome, now in hand by the Engineer Department, should be forthwith erected; a new Equatoreal, sanctioned by the Home Government, will, it is expected, soon be sent out.

Longitude determinations around the Indian coasts.

809. Some extensive operations of this class have been decided upon by the local Government, and specifications of the apparatus required for carrying the scheme into execution, by means of the electric telegraph, have been called for. The astronomer has expressed a doubt whether the present lines of Indian telegraph are adequate for the purpose, and has suggested to the Government that this fact should be ascertained before operations are commenced.

Meteorological and Magnetical Observations.

810. Records of this nature continue to be made three times daily; the former being immediately reduced and published in the next number of the "Fort Saint George Gazette," and also in the "Madras Athenæum" newspaper. Particular attention is given to the wind and rain, the most deficient elements in the averages of the past 20 years. The magnetic dip is determined weekly. Deflexion and vibration observations are made regularly at the beginning of each month.

Publications in hand.

811. A volume of hourly meteorological observations, extending from 1851 to 1855 inclusive, has long been completed, with the exception of the preface, but has been withheld in consequence of some doubts as to the corrections due to the thermometrical readings therein given. Two apparently excellent standard thermometers, received from the Kew Observatory last year, show very considerable and irregular corrections to be required; and as soon as the astronomer can spare time from other more pressing duties, to compare the old and new standards, from the freezing point upwards, the proper corrections can be deduced, and the volume in question completed and issued. The printing of the hourly magnetical observations has been carried up to the end of 1853, leaving the arrears of seven more years on hand. The reductions of these are in a forward state, and will be effected as early as possible.

Observatory Library.

812. The library has received some very valuable additions during the past year,

chiefly by the arrival of purchases, made with the sanction of the Home Government, before the embarkation of the present astronomer for India. It is, however, still only in a very deficient state.

Personal Staff.

813. After a long interval of repose, the Observatory is once more ready to enter upon a new career of active service, and to resume its former honourable position in the astronomical world. To achieve this aim, good instruments alone are in vain; they must be worked by intelligent assistants, interested in science, scrupulously accurate, and up to a certain very moderate standard of mathematical attainments. Out of nine native assistants, it is to be regretted that three only are qualified for such duties; a fourth may be available after patient training, but the other five are worse than useless, lacking the knowledge, energy, and accuracy required for the most simple scientific observations. Astronomical instruments are too valuable, and too easily deranged and injured, to be lightly entrusted to incompetent or unskilful hands; while to check the labours of such persons, and to trace and correct their incessant blunders, would occupy nearly the whole time of the qualified minority.

Two separate schemes for re-adjustment of staff will shortly be submitted to Government, one of which must be speedily adopted, if the Observatory is ever to attain rank amongst its European rivals. Higher qualifications, better pay, and a smaller number of men will doubtless produce important results with the new meridian circle.

GOVERNMENT MUSEUM.

Systematic arrangement of the Zoological and Geological Departments.

814. No important changes have taken place during the year under report; but the work of classification and arrangement of the several divisions has been steadily carried on during the year. The officer in charge has been engaged with the Zoological Department and general arrangements. Mr. W. King, of the geological survey, re-arranged the systematic collection of minerals during the monsoon season of 1861, and has lately taken up for a short time the geographical or district collections. Mr. R. B. Foote, of the same department, devoted such time as his duties as lecturer at the Engineering College permitted, to the arrangement of the paleontological collection, and he will, it is hoped, resume his labours in that department at the end of this year.

Arrangement of paleontological collection commenced.

Preparation of specimens.

815. The arrangement made during the early part of 1861 to confine the animal mounters entirely to their own duties, and to provide them with a separate workshop, has had the happiest result, as exhibited in the very great improvement that has taken place in the preparation and setting up of specimens, and this is more particularly visible in the fish, which, until lately, were not put up in such a way as to meet the requirements of science, and it has often been quite impossible to identify a great many of the specimens. These are being replaced as fast as possible, and all new specimens that offer are at once secured. Great attention is paid to the preservation of the natural form and, as far as is possible, of the colours of the fish.

Exchange of specimens with the Sydney Museum established.

816. By desire of his Excellency Sir W. Denison, K.C.B., a system of exchanges with the Sydney Museum was initiated during the past year; 230 specimens of mammals, birds, crustacea, and shells were sent to that museum in December 1861, and a very interesting collection, consisting of 177 specimens of mammals, birds, and reptiles has lately been received in exchange. This plan of exchanges, the only one by which a museum can be made complete, will be continued, and will be extended to other countries as means and opportunities of doing so become available.

Additions.

817. The Museum is indebted to his Excellency the Governor for a valuable collection of ores and their accompanying rocks from the Silver Mines of Pachuca, and Real del Monte, near Mexico; these consist of nine specimens of silver ores, and 65 specimens of the silver bearing strata.

Collection of ethnographical casts by the Messrs. Schlagentweit completed and arranged.

818. The collection of ethnographical casts taken by the Messrs. Schlagentweit, and consisting of 274 heads, 30 hands, and seven feet, ordered by Government for the Museum, has been completed during the year, and is now arranged in the ethnographical room.

Receipt of agricultural and other implements.

819. Some agricultural and other implements, with some models of useful machinery, 70 in all, for the purchase of which funds had been remitted to the late Honourable Court of Directors by Dr. Balfour, were received during the year 1861.

The total additions to the Museum during the year have been 1,256, of which 341 were to the zoological, 222 to the mineral, and 381 to the ethnological and industrial departments; of these 10 were contributed by Government, 83 by the public, and the remaining 219 purchased.

Library.

820. Every exertion has been made to obtain for the library the works necessary for the classification and arrangement of the objects in the Museum; 299 volumes have been purchased during the year, including those now on the way out by the "Indiana," and

which may be expected by the end of June. The total number of volumes now in the library is 2,156, to which must be added 27,328 numbers of the Patent Office papers, of which 449 were received this year.

To the conductors of the Museum a scientific library is a necessity; but as there is no other public scientific library in the Presidency, it must eventually become also of great value to the public. The reading-room has not hitherto been much used; only 32 tickets have been issued, and the attendance of ticket-holders has not been frequent. Doubtless, as the library becomes more complete, and better known to the public, they will avail themselves more generally of its advantages. It already contains much information not to be obtained elsewhere at Madras.

Expenditure.

821. The average monthly expenditure for salaries of establishment, petty repairs, binding of books, purchase of specimens and materials used in their preparation, &c., has been *Rs.* 307. 4. 6½.; *Rs.* 2,982. 11. 9., being the equivalent of 293 *l.*, were expended in London in the purchase and freight, &c , of books, and *Rs.* 240. 12. 0. in Madras.

Garden.

822. For the purchase and keep of animals, petty repairs, and wages of servants in the Zoological Gardens, the average expenditure has been *Rs.* 329. 10. 6. The cheetas and hyænas were removed to the People's Park on 28th September 1861, and the tigers will shortly follow.

Additions to Garden.

823. The number of additions to the Zoological Gardens during the year was 167, of which 29 were donations, and the remainder purchases.

Visitors to Museum and Garden.

824. The number of visitors to the Museum and Zoological Gardens was 3,64,889. The total number is considerably less than last year; but it will be observed that the proportion of those who wrote their names in the visitors' book is greater, viz., in all languages 1 in 6·66 against 1 in 7·46 last year, and the proportion which those who wrote in English bears to the total of signatures was 1 in 2·86 against 1 in 3·24 last year.

The diminished total has probably been caused by the removal of part of, and the reported removal of all, the animals to the People's Park. There can be no doubt that the live animals attract many visitors.

ELECTRIC TELEGRAPHS.

No new lines put up during the year, except local line from Central Office, Madras, to St. Thomas' Mount.

825. During the past year no new lines have been put up, with the exception of one to the Mount, as a local line separating this office from the main line to the south.

Line between Madras and Pondicherry altered.

826. The line between Madras and Pondicherry has been somewhat altered in direction, being brought nearer to the road, where at any great distance from it, and marked in other places outside the line of avenue trees.

Proposed substitution of Hamilton's iron standards for granite and chunam pillars, throughout the Madras Circle.

827. The granite slabs on the lines between Madras and the Bombay frontier *viâ* Vellore, Bangalore and Bellary, and between Bangalore and Mysore, are still in good order; but a great number of the brick in chunam and granite in chunam pillars on these lines have fallen; these have been partially replaced by posts, but will be altogether changed for Hamilton's iron standards as fast as these can be sent from Madras, where a sufficient number has been received to render all the lines in the Madras circle permanent. The despatch of these posts is necessarily slow, as carts are not obtainable for the carriage of the numbers required.

Improvement of the line between Cochin and Calicut on the Western Coast.

828. On the western coast, between Cochin and Calicut, the communication has been somewhat improved by the removal of decayed posts, and three cables being replaced by flying lines; but great difficulties still exist from the heavy winds and lightning, which cause the fall and destruction of posts and failure of cables; a slight alteration in the direction of the line is proposed, which will do away with some of the remaining cables, and the replacing of the posts by Hamilton's standards.

Number and length of messages despatched, distinguishing "service" from "private."

829. The accompanying tabular statement (marked A), shows the number and length of messages despatched from the offices in this circle, distinguishing "service" from "private." The result, as compared with the number of messages despatched in the previous year, is as follows:—

	Rs.	*a.*	*p.*
In 1861-62 - - - -	42,671	–	–
In 1860-61 - - - -	40,013	–	–
Increase -	*Rs.* 2,658	–	–

Increase of private messages.

830. On reference to the above statement it will be seen that there has been an increase of revenue on private messages as compared with the previous year.

Revenue from private messages.

	Rs.	a.	p.
In 1861–62 - - - -	70,793	11	3
In 1860–61 - - - -	69,258	–	9
Increase - -	Rs. 1,535	10	6

Decrease of service messages.

831. On service messages there is a decrease.

	Rs.	a.	p.
In 1860–61 - - - -	16,439	1	–
In 1861–62 - - - -	14,397	15	3
Decrease - -	Rs. 2,041	1	9

Increase of messages sent by Natives.

832. The number of messages sent by natives is steadily on the increase. The number as compared with the previous year is as follows:—

	Rs.	a.	p.
In 1861–62 - - - -	10,880	–	–
In 1860–61 - - - -	9,538	–	–
Increase - -	Rs. 1,342	–	–

Increased use of Telegraph Stamps.

833. The use of the telegraph stamps, for payment of messages from places not being telegraph stations, has become more general.

The collections under this head are as follow:—

	Rs.	a.	p.
In 1861–62 - - - -	1,100	15	–
In 1860–61 - - - -	706	–	–
Increase - -	Rs. 394	15	–

The greater portion of these come from the ports of Mangalore and Tellicherry on the western coast.

Opening of the Great Southern India Railway Telegraph Line.

834. The Great Southern of India Railway Telegraph was opened to the public during May 1861, and messages have been received on their account by the Government Telegraph Line, and *vice versâ*, amounting to *Rs.* 850. 5.

Interruptions and causes.

835. The interruptions during the past year in the Madras circle have not been many, till the month of April 1862, when, owing to heavy storms of wind and severe lightning, posts and pillars were destroyed, and caused some serious interruptions. Steps are being taken for the despatch of Hamilton's standards, and these once up, there need be little apprehension of any further interruptions.

Expenditure under the headings, salary, house rent, contingencies.

836. The statement marked B shows the gross amount of disbursements under the headings of salary, house-rent, and contingencies, throughout the Madras circle. There has been a considerable decrease of expenditure on account of salaries, compared with the previous year, as shown below:—

Disbursements on account of salary.

	Rs.	a.	p.
In 1860–61 - - - -	1,57,288	3	7
In 1861–62 - - - -	1,26,736	10	5
Decrease - -	Rs. 30,551	9	2

837. This decrease is owing, in a great measure, to the dismissal of the horse patrols, who were found not as useful as was expected.

The amount paid for house rent during the year was 9,636 rupees.

The amount expended for the purchase of stores was—

	Rs.	a.	p.
For the lines - - - -	7,285	6	3
For offices - - - -	29,357	15	7
Total - - -	Rs. 36,643	5	10

APPENDICES.

APPENDICES to the Annual Report on the Administration of the Madras Presidency, during the Year 1861-62.

Appendix No. I.

Table A.—Showing the Number of Suits instituted and disposed of during the Year 1861.

	Depending 1st January 1861.	Instituted.	Total.	Decided on Merits.	Dismissed on Default.	Adjusted or Withdrawn.	Otherwise disposed of.	Depending 31st December 1861.
Bellary - - - - -	739	7,060	7,799	2,873	52	2,072	1,214	1,588
Calicut - - - - -	7,981	17,032	25,013	5,099	778	3,185	851	15,100
Chicacole - - - - -	1,226	5,470	6,696	1,840	137	848	87	3,794
Chingleput - - - - -	1,379	6,090	7,469	2,101	504	1,411	40	3,413
Chittoor - - - - -	2,115	20,039	22,154	4,907	1,827	3,787	2,564	9,061
Coimbatore - - - - -	1,960	12,588	14,548	4,588	518	4,066	859	4,517
Cuddalore - - - - -	2,972	19,206	32,178	4,683	676	5,820	221	10,778
Cuddapah - - - - -	3,380	8,785	12,165	3,323	1,678	1,731	397	5,036
Guntoor - - - - -	271	3,178	3,449	1,401	110	1,239	1	698
Honore - - - - -	4,114	11,632	15,746	2,918	266	1,275	1,094	10,193
Madura - - - - -	4,904	16,448	21,352	3,808	822	5,010	205	11,507
Mangalore - - - - -	5,339	17,077	22,416	4,438	340	2,557	1,002	14,109
Masulipatam - - - - -	1,050	5,638	6,588	1,603	267	1,743	259	2,716
Negapatam - - - - -	4,449	21,730	26,179	4,977	1,674	6,502	930	12,096
Nellore - - - - -	526	6,097	6,623	2,096	608	2,431	11	1,477
Nundial - - - - -	979	6,307	7,286	2,943	396	1,312	726	2,209
Rajahmundry - - - -	2,796	10,054	12,850	2,488	159	1,820	1,785	6,598
Salem - - - - -	2,353	15,340	17,693	5,346	1,156	4,550	18	6,623
Tanjore - - - - -	5,428	33,476	38,904	6,236	1,598	10,247	1,989	18,834
Tellicherry - - - - -	5,775	14,540	20,315	3,911	684	1,499	1,636	12,585
Tinnevelly - - - - -	1,501	10,066	11,567	3,565	990	4,707	459	1,946
Trichinopoly - - - -	3,162	10,409	13,571	2,332	1,074	3,579	492	6,094
Agency, Ganjam - - -	824	1,907	2,731	949	303	458	79	942
Agency, Vizagapatam - -	3,632	2,907	6,539	777	287	708	499	4,268
Total of 1861 - - -	68,855	2,82,976	3,51,831	78,872	16,804	72,557	17,418	1,66,180
Total of 1860 - - -	88,132	1,37,834	2,25,966	62,011	13,555	63,152	18,393	68,885
Increase - -	–	1,45,142	1,25,865	16,861	3,249	9,405	–	97,315
Decrease - -	19,277	- -	- -	–	–	–	975	—

Table B.

	FROM THE DECREES OF					
	Civil Judges.	Subordinate Judges.	Principal Sudder Ameens.	Sudder Ameens.	District Moonsiffs.	Total.
Suits appealable - -	107	289	324	1,139	25,585	27,444
Appealed - - -	67	85	136	589	11,463	12,340
Affirmed - - -	15	56	66	213	3,988	4,338
Modified or reversed -	6	23	25	172	2,436	2,662

TABLE C.—PETTY OFFENCES.

ZILLAHS AND AGENCIES.	Pending and Summoned.	Released.	Discharged on Razeenamah.	Punished.	Dealt with by		
					Village Police.	District Police.	Magistracy.
Bellary	7,261	2,576	1,560	3,116	698	5,743	820
Calicut	10,141	3,653	3,161	3,295	1,789	7,994	326
Chicacole	12,148	4,443	5,301	2,371	1,591	10,416	140
Chingleput	11,937	3,211	4,290	39,400	1,284	8,991	1,205
Chittoor	10,273	4,164	1,607	4,235	1,826	8,171	276
Coimbatore	14,805	3,895	2,705	8,120	3,970	10,435	400
Cuddalore	13,968	4,566	3,346	6,056	495	12,961	512
Cuddapah	3,965	1,182	917	1,866	31	3,639	295
Guntoor	14,407	5,019	6,316	3,060	1,606	12,473	328
Honore	3,618	1,072	1,008	1,477	621	2,902	95
Madura	12,143	5,016	2,365	4,762	3,128	8,170	845
Mangalore	4,079	1,389	1,843	810	452	3,439	188
Masulipatam	9,067	2,657	2,843	3,530	839	7,819	407
Negapatam	8,107	3,713	2,155	2,155	1,099	6,851	157
Nellore	11,592	4,900	3,205	3,487	854	11,318	420
Nundial	5,037	1,698	1,094	2,233	467	4,289	269
Rajahmundry	9,981	3,508	4,530	1,922	1,888	7,825	268
Salem	15,225	5,869	2,931	6,235	1,476	12,543	1,016
Tanjore	11,901	5,511	3,272	3,073	884	10,792	225
Tellicherry	4,785	2,113	976	1,658	456	3,912	377
Tinnevelly	7,886	3,358	1,612	2,911	1,789	5,735	362
Trichinopoly	8,520	4,062	1,494	2,856	175	7,970	375
Agency, Ganjam	5,787	1,849	2,734	1,189	506	5,207	74
Agency, Vizagapatam	17,706	7,597	7,770	2,339	10	17,646	50
TOTAL of 1861	2,34,339	87,021	69,035	76,716	27,934	1,96,239	9,430
TOTAL of 1860	2,29,867	85,857	79,890	62,363	17,727	2,02,411	9,067
Increase	4,472	1,164	- -	14,353	10,207	- -	363
Decrease	- -	- -	10,855	- -	- -	6,172	—

TABLE D.—CRIMES and MISDEMEANOURS.

ZILLAHS and AGENCIES.	Total Number of Cases of all Descriptions brought before the District Police, Magistracy, and the Courts, including those pending at the Commencement of the Year, &c.		Released by the District Police and Magistracy.	Dealt with by the Magistracy under Act VII. of 1843.			By the Subordinate Criminal Courts.			By the Session Courts.			By the Sudder Court.		
				Convicted and punished.	Acquitted and released.	Held to security.	Convicted and punished.	Acquitted and released.	Held to security.	Convicted and punished.	Acquitted and released.	Held to security.	Convicted and punished.	Acquitted and released.	Held to security.
	Cases.	Persons.	PERSONS.												
Bellary	1,065	3,152	2,085	131	183	3	145	265	1	55	150	–	7	11	3
Calicut	560	1,368	785	20	33	3	158	120	–	129	55	–	9	–	–
Chicacole	243	658	401	22	5	–	53	67	12	40	32	12	4	1	–
Chingleput	400	1,057	370	74	8	1	221	100	15	60	141	2	3	2	–
Chittoor	680	2,312	980	49	6	3	402	393	1	118	104	4	20	14	–
Coimbatore	836	2,153	1,245	160	21	9	162	213	71	111	56	–	8	5	–
Cuddalore	1,161	2,383	1,050	229	102	21	226	316	3	113	153	9	11	20	–
Cuddapah	607	2,275	1,383	17	–	–	114	204	12	115	135	18	11	4	1
Guntoor	171	584	310	26	25	3	44	77	2	17	42	13	4	–	1
Honore	249	413	140	17	–	5	87	61	5	31	20	2	3	7	–
Madura	505	1,240	627	44	61	6	157	201	3	44	70	12	8	15	–
Mangalore	270	725	411	11	3	1	53	62	5	44	82	2	16	4	1
Masulipatam	209	629	342	22	7	16	51	88	1	20	64	–	2	4	–
Negapatam	232	655	429	24	4	2	37	69	2	16	47	–	2	2	–
Nellore	707	1,938	1,391	6	1	–	152	69	7	48	156	–	6	10	–
Nundial	523	1,119	721	31	34	–	75	117	1	32	39	6	11	3	–
Rajahmundry	455	1,017	588	49	24	4	116	96	19	38	25	1	3	8	–
Salem	982	2,106	1,185	218	46	8	119	243	13	73	126	3	14	17	–
Tanjore	251	712	463	11	7	–	37	65	6	51	42	1	2	3	–
Tellicherry	420	931	468	25	19	1	147	141	3	42	29	5	8	3	–
Tinnevelly	819	2,422	1,891	18	6	–	131	183	17	25	38	–	28	27	–
Trichinopoly	383	1,011	715	6	–	–	56	115	2	7	97	–	4	2	–
Agency, Ganjam	248	751	478	–	–	–	99	63	38	9	29	–	2	–	–
Ditto, Vizagapatam	194	572	356	–	–	–	51	46	18	32	24	4	16	2	–
TOTAL of 1861	12,170	32,183	18,814	1,210	595	86	2,893	3,374	257	1,260	1,750	94	197	173	6
TOTAL of 1860	9,817	24,730	15,401	881	417	90	1,976	2,738	179	889	1,459	66	157	113	7
Increase	2,353	7,453	3,413	329	178	–	917	636	78	371	291	28	40	60	–
Decrease	–	–	–	–	–	4	–	–	–	–	–	–	–	–	1

APPENDIX No. II.

(A.)—STATEMENT of CASES committed to the CRIMINAL SESSIONS, during the Year 1861.

OFFENCES.	Town Police Court.				Vepery Police Court.				Royapet Police Court.				TOTAL.				Nature of Sentence.			Amount of Property said to have been Stolen.	Amount of Property Recovered.
	Number of Cases.	Number of Persons.	Convicted.	Acquitted.	Number of Cases.	Number of Persons.	Convicted.	Acquitted.	Number of Cases.	Number of Persons.	Convicted.	Acquitted.	Total Number of Cases.	Total Number of Persons.	Total Convicted.	Total Acquitted.	Death.	Transportation.	Imprisonment.	Rs. a. p.	Rs. a. p.
Murder	1	1	1	–	–	–	–	–	2	2	2	–	3	3	3	–	3	–	–	—	—
Manslaughter	3	6	4	2	–	–	–	–	2	2	1	1	5	8	5	3	–	–	5	—	—
Cutting and wounding with intent to kill	1	1	1	–	3	2	2	–	–	–	–	–	4	3	3	–	–	3	–	—	—
Administering poison	–	–	–	–	–	–	–	–	1	1	1	–	1	1	1	–	–	1	–	—	—
Assault	1	2	1	1	–	–	–	–	–	–	–	–	1	2	1	1	–	–	1	—	—
Carnally abusing girls under seven years	–	–	–	–	2	2	2	–	–	–	–	–	2	2	2	–	1*	–	1	—	—
Kidnapping children	–	–	–	–	1	2	1	1	1	2	2	–	2	4	3	1	–	–	3	—	—
Harbouring kidnapped children	–	1	–	1	–	–	–	–	–	1	1	–	–	2	4	1	–	–	1	—	—
Enticing away girls under 16 years	–	–	–	–	1	2	1	1	–	–	–	–	1	2	1	1	–	–	1	—	—
Maliciously decoying away children with intent to steal from their person.	3	4	2	2	–	–	–	–	–	–	–	–	3	4	2	2	–	–	2	43 – –	—
Poisoning animals	1	1	1	–	–	–	–	–	–	–	–	–	1	1	1	–	–	1	–	—	—
Burglary	–	–	–	–	1	4	4	–	–	–	–	–	1	4	4	–	–	1	3	190 5 –	8 4 –
Larceny and stealing from the person	22	45	39	6	13	16	14	2	12	17	11	6	47	78	64	14	–	9	55	12,527 2 11	8,279 10 8
Receiving stolen property	–	6	4	2	–	2	2	–	–	4	1	3	–	12	7	5	–	–	7	—	—
Embezzlement and breach of trust	8	4	3	1	2	2	1	1	–	–	–	–	10	6	4	2	–	–	4	—	—
Obtaining property by false pretences	2	5	4	1	2	3	2	1	–	–	–	–	4	8	6	2	–	–	6	—	—
Forging and uttering	5	4	3	1	2	2	1	1	–	–	–	–	7	6	4	2	–	1	3	—	—
Fraudulently concealing a will	–	–	–	–	1	1	–	1	–	–	–	–	1	1	–	1	–	–	–	—	—
Perjury	3	3	1	2	–	–	–	–	–	–	–	–	3	3	1	2	–	–	1	—	—
Extortion	1	1	–	1	–	–	–	–	–	–	–	–	1	1	–	1	–	–	–	—	—
Unlawful possession of coining-tools and of counterfeit coin.	–	–	–	–	–	–	–	–	1	2	1	1	1	2	1	1	–	–	1	—	—
Importing sulphur without license	1	1	–	1	–	–	–	–	–	–	–	–	1	1	–	1	–	–	–	—	—
TOTAL	52	85	64	21	28	38	30	8	19	31	20	11	99	154	117	40	4	16	94	12,760 7 11	8,287 14 8

* Commuted to seven years' transportation.

(B.)—Statement of Offences summarily disposed of by the Magistrates, during the Year 1861.

OFFENCES.	TOWN POLICE COURT.								VEPERY POLICE COURT.								ROYAPET POLICE COURT.								TOTAL.							
	2. Number of Cases.	3. Number of Prisoners.	4. Imprisonment with Hard Labour.	5. Imprisonment.	6. Flogged.	7. Fined.	8. Acquitted.	9. Compromised or Dismissed for Default.	2. Number of Cases.	3. Number of Prisoners.	4. Imprisonment with Hard Labour.	5. Imprisonment.	6. Flogged.	7. Fined.	8. Acquitted.	9. Compromised or Dismissed for Default.	2. Number of Cases.	3. Number of Prisoners.	4. Imprisonment with Hard Labour.	5. Imprisonment.	6. Flogged.	7. Fined.	8. Acquitted.	9. Compromised or Dismissed for Default.	2 Number of Cases.	3. Number of Prisoners.	4. Imprisonment with Hard Labour.	5. Imprisonment.	6. Flogged.	7. Fined.	8. Acquitted.	9 Compromised or Dismissed for Default.
Larceny above 50 rupees	1	9	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	9	9	–	–	–	–	–
Larceny	604	707	285	12	228	–	182	–	272	280	98	4	106	–	72	–	227	267	119	2	92	–	54	–	1,103	1,254	502	18	426	–	308	–
Receiving stolen goods	51	57	28	1	3	–	25	–	22	25	2	–	5	1	17	–	28	36	24	2	1	1	8	–	101	118	54	3	9	2	50	–
Embezzlement and breach of trust	77	77	58	3	–	–	16	–	41	32	20	–	2	–	10	–	42	47	30	–	1	–	16	1	160	156	108	3	3	–	42	1
Obtaining property by false pretences	41	14	7	–	–	–	7	–	14	19	16	–	–	–	3	–	18	22	12	–	–	–	10	–	46	55	35	–	–	–	20	–
Possessing stolen property without satisfactorily accounting for the same.	46	52	32	3	–	5	12	–	17	17	4	–	–	5	8	–	24	28	12	–	–	10	6	–	87	97	48	3	–	20	26	–
Stealing growing plants	6	16	–	–	1	13	2	–	28	31	2	–	2	24	3	–	41	66	7	–	3	43	13	–	75	113	9	–	6	80	18	–
Wrongful appropriation of property found	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	1	–	–	–	–	–	1	1	1	–	–	–	–	–
Reputed thieves	38	43	33	–	–	–	10	–	4	4	2	–	–	–	2	–	11	12	7	–	–	–	5	–	53	59	42	–	–	–	17	–
Malicious injury	5	10	–	–	–	3	7	2	10	10	–	–	–	4	6	1	9	15	–	–	–	8	7	–	24	35	–	–	–	15	20	3
Possessing false weights, &c. &c.	16	16	2	–	–	10	4	–	4	4	–	–	–	3	1	–	–	–	–	–	–	–	–	–	20	20	2	–	–	13	5	–
Purchasing property from children	–	–	–	–	–	–	–	–	1	1	–	–	–	1	–	–	1	2	–	–	–	2	–	–	2	3	–	–	–	3	–	–
Abduction	6	3	1	–	–	–	2	3	22	18	–	–	–	–	18	4	8	11	–	–	–	2	9	–	36	32	1	–	–	2	29	7
Crimping	2	4	2	2	–	–	–	–	3	6	5	–	–	–	1	–	–	–	–	–	–	–	–	–	5	10	7	2	–	–	1	–
Assault	1,647	1,281	29	2	–	600	650	807	1,223	754	7	–	–	378	369	827	460	749	4	–	–	330	415	362	3,330	2,784	40	2	–	1,308	1,434	1,996
Assaulting police in execution of duty	107	178	30	1	–	85	57	–	38	56	1	1	–	35	19	–	60	80	5	–	–	51	24	–	205	309	36	2	–	171	100	–
Breaches of the peace	2,051	3,688	55	6	–	2,839	788	54	874	1,599	3	–	–	1,155	441	56	902	1,837	3	–	–	1,560	265	70	3,827	7,124	61	6	–	5,582	1,494	180
Trespasses	47	53	–	–	–	35	18	2	80	143	1	–	–	98	44	20	53	85	–	–	–	56	29	2	180	281	1	–	–	189	91	24
Cruelty to animals	38	38	–	–	–	34	4	–	62	62	–	–	–	41	21	–	226	231	–	–	–	210	21	–	326	331	–	–	–	285	46	–
Riding or driving furiously	247	299	–	–	–	251	48	–	214	218	–	–	–	156	62	–	480	491	–	–	–	404	87	–	941	1,008	–	–	–	811	197	–
Obstructing public roads, and other minor offences, under Section 19, Act XLVIII. of 1860.	787	847	–	–	–	622	225	–	152	158	–	–	–	113	45	–	200	227	–	–	–	171	56	–	1,139	1,232	–	–	–	906	326	–
Nuisances	2,751	2,751	–	–	–	2,356	395	–	1,315	1,315	–	–	–	892	423	–	713	762	–	–	–	587	175	–	4,779	4,828	–	–	–	3,835	993	–
Drunk and incapable	300	300	7	1	–	265	27	–	137	145	2	–	–	118	25	–	113	119	–	–	–	109	10	–	550	564	9	1	–	492	62	–
Begging in the streets	6	6	–	–	–	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	6	–	–	–	–	6	–
Gambling in the streets	97	282	8	–	–	205	69	–	10	36	–	–	–	31	5	–	52	97	1	–	–	73	23	–	159	415	9	–	–	309	97	–
Keeping gaming-houses	3	4	–	–	–	4	–	–	2	26	–	–	–	25	1	–	–	–	–	–	–	–	–	–	5	30	–	–	–	29	1	–
Keeping brothels	4	9	–	–	–	9	–	–	6	4	–	–	–	1	3	2	5	7	–	–	–	–	7	–	15	20	–	–	–	10	10	2
Keeping taverns, &c. without license	1	1	–	–	–	1	–	–	2	3	–	–	–	3	–	–	–	–	–	–	–	–	–	–	3	4	–	–	–	4	–	–
Breaches of license	2	4	–	–	–	–	4	–	–	–	–	–	–	–	–	–	2	2	–	–	–	2	–	–	4	6	–	–	–	2	4	–
Conducting processions without license	5	5	–	–	–	4	1	–	11	17	–	–	–	12	5	–	–	–	–	–	–	–	–	–	16	22	–	–	–	16	6	–
Taking spirits into jail, &c. &c.	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	1	–	–	–	–	–
Escape from legal confinement	1	1	–	1	–	–	–	–	1	1	1	–	–	–	–	–	1	1	1	–	–	–	–	–	3	3	2	1	–	–	–	–
Refusing maintenance	298	205	3	–	–	143	59	93	208	132	4	–	–	45	83	73	52	52	–	–	–	28	24	22	558	389	7	–	–	216	166	188
Violation of duty, &c. by police officers	5	5	–	2	–	1	2	–	7	5	3	1	–	–	1	–	4	4	2	–	–	1	1	–	16	14	5	3	–	2	4	–
Neglecting to obey summons, &c. &c.	1	1	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	1	–	–	2	2	–	–	–	2	–	–
Breaches of the Salt Laws	–	–	–	–	–	–	–	–	1	3	–	–	–	–	3	–	–	–	–	–	–	–	–	–	1	3	–	–	–	–	3	–
Ditto Shipping Registration Act, X. of 1841	1	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	1	–
Ditto Apprentice Act, XIX. of 1850	–	–	–	–	–	–	–	–	1	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	1	–
Ditto Abkary Act, XIX. of 1852	9	23	–	–	–	9	14	–	9	13	–	–	–	8	5	–	16	22	–	–	–	6	16	–	34	58	–	–	–	23	35	–
Ditto Railway Act, XVIII. of 1854	3	3	–	–	–	2	1	–	1	4	–	–	–	4	–	–	–	–	–	–	–	–	–	–	4	7	–	–	–	6	1	–
Ditto Conservancy Act, XIV. of 1856	242	242	–	–	–	124	118	–	76	77	–	–	–	35	42	–	64	115	–	–	–	40	75	20	382	434	–	–	–	199	235	20
Ditto Wheel Tax Act, XXVI. of 1856	2	2	–	–	–	2	–	–	2	2	–	–	–	2	–	–	7	9	–	–	–	4	5	–	11	13	–	–	–	8	5	–
Ditto Marine Police Act, XXVIII. of 1858	3	3	–	–	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	3	–	–	1	2	–	–
Ditto Contract Act, XIII. of 1859	28	16	–	–	–	–	6	17	21	9	–	–	–	–	9	12	20	22	2	–	–	6	14	17	69	47*	2	–	–	6	29	46
Preferring false charges	10	10	–	–	–	10	–	–	13	13	–	–	–	4	9	–	11	11	–	–	–	11	–	–	34	34	–	–	–	25	9	–
TOTAL	9,563	11,262	590	34	233	7,635	2,760	978	4,904	5,243	171	6	115	8,194	1,757	995	3,852	5,431	230	4	97	3,725	1,375	494	18,319	21,936	991	44	445	14,554	5,829	2,467

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* Of these, 10 persons were ordered to fulfil their Contracts.

(C.)—ABSTRACT STATEMENT of Committable CASES investigated at the MAGISTRATE'S COURTS, during the Year 1861, in which the Prisoners were Discharged.

OFFENCES.	Town Police Court.		Vepery Police Court.		Royapet Police Court.		TOTAL.	
	Number of Cases.	Number of Persons.	Number of Cases.	Number of Persons.	Number of Cases.	Number of Persons.	Number of Cases.	Number of Persons.
Attempt to poison animals - - -	1	2	–	–	–	–	1	2
Rape - - - - - - -	–	–	1	1	–	–	1	1
Conspiracy and perjury - - -	1	2	–	–	–	–	1	2
Forging and uttering - - - -	1	2	–	–	–	–	1	2
Uttering counterfeit coins - - -	–	–	1	1	–	–	1	1
Larceny - - - - - - -	4	4	1	2	2	3	7	9
Receiving stolen property - - -	1	1	–	–	–	–	1	1
Embezzlement and breach of trust -	–	–	1	1	4	5	5	6
TOTAL - -	8	11	4	5	6	8	18	24

(D.)—ABSTRACT STATEMENT of CASES summarily disposed of at the TOWN POLICE COURT, under the Merchant Shipping Act of 1854 and Act I. of 1859, during the Year 1861.

OFFENCES.	1. Number of Cases.	2. Number of Defendants.	3. Number Convicted and Sentenced to Hard Labour.	4. Number Fined.	5. Number Returned on Board.	6. Compromised.	7. Number Acquitted.
Desertion - - - - -	4	5	5	—	—	—	—
Continued wilful disobedience to lawful commands.	7	23	7	- -	4	- -	12
Continued wilful neglect of duty	6	11	8	- -	1	- -	2
Wilful disobedience to lawful commands.	11	24	23	- -	- -	1	—
Embezzling cargo - - -	13	33	29	- -	- -	- -	4
Shipping a seaman without agreement.	1	1	- -	- -	- -	- -	1
Assault - - - - -	19	33	17	13	- -	1	2
Assaulting police officer on board ship while in the execution of his duty.	1	3	- -	3	—	—	—
Disorderly riotous conduct on boardship towards their superiors.	2	2	2	—	—	—	—
TOTAL - - -	64	135	91	16	5	2	21

(E.)—ABSTRACT STATEMENT of CASES summarily disposed of at the TOWN POLICE COURT, under the Boat Act (No. IV. of 1842), during the Year 1861.

OFFENCES.	1. Number of Cases.	2. Number of Defendants.	3. Number Convicted and Flogged.	4. Number Fined.	5. Compromised.	6. Number Acquitted.
Desertion - - - - - - - -	10	10	2	- -	4	4
Neglect of duty and disorderly conduct while afloat in the roads alongside of vessels.	1	22	22	—	—	—
Landing goods beyond the prescribed limits -	1	1	- -	- -	- -	1
Overloading boats - - - - - -	1	2	–	2	—	—
TOTAL - - -	13	35	24	2	4	5

CHAP. X.
Madras.

(F.)—GENERAL COMPARATIVE STATEMENT of CASES committed for Trial to the CRIMINAL SESSIONS, and of those summarily disposed of by the MAGISTRATES, during the Year 1861.

OFFENCES.	1 8 6 0.														1 8 6 1.													
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
	Number of Cases.	Number of Persons.	Sentenced to Death.	Transportation.	Imprisonment with Hard Labour.	Simple Imprisonment.	Flogged.	Fined.	Acquited.	Dismissed the Service.	Reduced.	Suspended.	Sent on Board Ship.	Compromised or Dismissed for Default.	Number of Cases.	Number of Persons.	Sentenced to Death.	Transportation.	Imprisonment with Hard Labour.	Simple Imprisonment.	Flogged.	Fined.	Acquitted.	Dismissed the Service.	Reduced.	Suspended.	Sent on Board Ship.	Compromised or Dismissed for Default.
Murder	1	1	–	–	–	–	–	–	1	–	–	–	–	–	3	3	3	–	–	–	–	–	–	–	–	–	–	–
Manslaughter	2	3	–	–	–	–	–	–	3	–	–	–	–	–	5	8	–	–	–	–	–	–	3	–	–	–	–	–
Cutting and wounding with intent to kill	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	3	–	3	–	–	–	–	–	–	–	–	–	–
Rape	1	1	–	–	–	–	–	–	1	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Carnally abusing a girl under seven years	1	1	–	–	1	–	–	–	–	–	–	–	–	–	2	2	1	–	1	–	–	–	–	–	–	–	–	–
Feloniously assaulting a married woman	1	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Administering poison	1	1	–	1	–	–	–	–	–	–	–	–	–	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–
Assault	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	–	–	1	–	–	–	1	–	–	–	–	–
Poisoning animals	2	2	–	–	–	–	–	–	2	–	–	–	–	–	2	3	–	1	–	–	–	–	2	–	–	–	–	–
Concealing the birth of a child	1	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bigamy	1	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Enticing away girls under 16 years	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	–	–	1	–	–	–	1	–	–	–	–	–
Maliciously decoying away children with intent to steal from their person	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	4	–	–	2	–	–	–	2	–	–	–	–	–
Kidnapping children	8	6	–	–	5	–	–	–	1	–	–	–	–	–	2	4	–	–	3	–	–	–	1	–	–	–	–	–
Harbouring kidnapped children	5	4	–	–	2	–	–	–	2	–	–	–	–	–	–	2	–	–	1	–	–	–	1	–	–	–	–	–
Arson	1	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Burglary	3	8	–	1	2	–	–	–	5	–	–	–	–	–	1	4	–	1	3	–	–	–	–	–	–	–	–	–
Uttering counterfeit coin	4	5	–	–	–	–	–	–	5	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Unlawful possession of coining-tools and counterfeit coin	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	–	–	1	–	–	–	1	–	–	–	–	–
Forging and uttering	7	8	–	–	1	–	–	–	7	–	–	–	–	–	8	8	–	1	3	–	–	–	4	–	–	–	–	–
Fraudulently concealing a will	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Perjury	5	5	–	1	3	–	–	–	1	–	–	–	–	–	3	3	–	–	1	–	–	–	2	–	–	–	–	–
Conspiracy	4	8	–	–	5	–	–	–	3	–	–	–	–	–	1	2	–	–	–	–	–	–	2	–	–	–	–	–
Bribery	2	5	–	–	–	1	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Extortion	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Larceny	40	56	–	5	22	–	–	–	29	–	–	–	–	–	54	87	–	9	55	–	–	–	23	–	–	–	–	–
Receiving stolen property	10	26	–	1	6	–	–	–	19	–	–	–	–	–	1	13	–	–	7	–	–	–	6	–	–	–	–	–
Obtaining money by false pretences	7	8	–	–	8	–	–	–	5	–	–	–	–	–	4	8	–	–	5	–	–	–	2	–	–	–	–	–
Embezzlement and breach of trust	11	12	–	–	7	–	–	–	5	–	–	–	–	–	15	12	–	–	4	–	–	–	8	–	–	–	–	–
Endangering safety of passengers by train	1	1	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Escaping from legal confinement	3	3	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Importing sulphur without license	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–

Larceny above 50 rupees	2	16	–	–	13	–	–	–	3	–	–	–	–	–	1	9	–	–	9	–	–	–	–	–	–	–	–	–
Larceny	881	1,039	–	–	381	14	345	–	299	–	–	–	–	–	1,103	1,254	–	–	502	18	426	–	308	–	–	–	–	–
Receiving stolen goods	94	116	–	–	36	1	6	3	70	–	–	–	–	–	101	118	–	–	54	3	9	2	50	–	–	–	–	–
Embezzlement and breach of trust	112	115	–	–	77	2	–	–	36	–	–	–	–	3	160	156	–	–	108	3	3	–	42	–	–	–	–	1
Obtaining property by false pretences	38	45	–	–	19	1	1	–	24	–	–	–	–	1	46	55	–	–	35	–	–	–	20	–	–	–	–	–
Possessing stolen property without satisfactorily accounting for the same	222	275	–	–	82	1	7	70	115	–	–	–	–	–	87	97	–	–	48	3	–	20	26	–	–	–	–	–
Stealing growing plants	35	47	–	–	4	–	12	23	8	–	–	–	–	–	75	113	–	–	9	–	6	80	18	–	–	–	–	–
Wrongful appropriation of property found	5	6	–	–	5	–	1	–	–	–	–	–	–	–	1	1	–	–	1	–	–	–	–	–	–	–	–	–
Reputed thieves	67	85	–	–	49	1	3	–	32	–	–	–	–	–	53	59	–	–	42	–	–	–	17	–	–	–	–	–
Malicious injury	54	28	–	–	–	–	–	5	23	–	–	–	–	29	24	35	–	–	–	–	–	15	20	–	–	–	–	3
Possessing false weights and measures	12	12	–	–	1	–	–	7	4	–	–	–	–	–	20	20	–	–	2	–	–	13	5	–	–	–	–	–
Purchasing property from children	7	9	–	–	2	–	–	3	4	–	–	–	–	–	2	3	–	–	–	–	–	3	–	–	–	–	–	–
Abduction	40	53	–	–	4	–	–	4	45	–	–	–	–	6	36	32	–	–	1	–	–	2	29	–	–	–	–	7
Crimping	4	7	–	–	4	3	–	–	–	–	–	–	–	–	5	10	–	–	7	2	–	–	1	–	–	–	–	–
Assault	4,109	3,319	–	–	52	9	3	1,029	2,256	–	–	–	–	2,833	3,330	2,784	–	–	40	2	–	1,308	1,434	–	–	–	–	1,996
Assaulting police officers in the execution of their duty	196	286	–	–	15	2	2	186	81	–	–	–	–	–	205	309	–	–	36	2	–	171	100	–	–	–	–	–
Breaches of the peace	3,460	6,322	–	–	32	11	6	4,861	1,412	–	–	–	–	197	3,827	7,124	–	–	61	6	–	5,563	1,494	–	–	–	–	180
Trespasses	223	384	–	–	–	–	–	190	194	–	–	–	–	40	180	281	–	–	1	–	–	189	91	–	–	–	–	24
Cruelty to animals	365	365	–	–	–	–	–	330	35	–	–	–	–	–	326	331	–	–	–	–	–	285	46	–	–	–	–	–
Riding or driving furiously	588	614	–	–	–	–	–	510	104	–	–	–	–	–	941	1,008	–	–	–	–	–	811	197	–	–	–	–	–
Obstructing the public roads and other minor offences, under Section 19, Act XLVIII. of 1860	1,151	1,246	–	–	–	–	–	846	400	–	–	–	–	6	1,139	1,232	–	–	–	–	–	906	326	–	–	–	–	–
Nuisances	5,816	5,816	–	–	–	–	2	5,222	592	–	–	–	–	4	4,779	4,828	–	–	–	–	–	3,835	993	–	–	–	–	–
Drunk and incapable	539	555	–	–	8	1	1	491	54	–	–	–	–	–	550	564	–	–	9	1	–	492	62	–	–	–	–	–
Begging in the streets	2	2	–	–	1	–	1	–	–	–	–	–	–	–	6	6	–	–	–	–	–	–	6	–	–	–	–	–
Gambling in the streets	186	543	–	–	27	–	3	404	199	–	–	–	–	–	159	415	–	–	9	–	–	309	97	–	–	–	–	–
Keeping gaming-houses	10	11	–	–	1	–	–	10	–	–	–	–	–	–	5	30	–	–	–	–	–	29	1	–	–	–	–	–
Keeping brothels and disorderly houses	3	2	–	–	–	–	–	1	1	–	–	–	–	1	15	20	–	–	–	–	–	10	10	–	–	–	–	2
Keeping taverns, &c. without license	1	1	–	–	–	–	–	1	–	–	–	–	–	–	3	4	–	–	–	–	–	4	–	–	–	–	–	–
Breaches of license	2	3	–	–	–	–	–	1	2	–	–	–	–	–	4	6	–	–	–	–	–	2	4	–	–	–	–	–
Conducting processions without license	–	–	–	–	–	–	–	–	–	–	–	–	–	–	16	22	–	–	–	–	–	16	6	–	–	–	–	–
Taking spirits into gaols, &c.	4	4	–	–	4	–	–	–	–	–	–	–	–	–	1	1	–	–	1	–	–	–	–	–	–	–	–	–
Escape from legal confinement	1	1	–	–	–	–	–	–	1	–	–	–	–	–	3	3	–	–	2	1	–	–	–	–	–	–	–	–
Refusing to maintain wives and children	765	548	–	–	18	4	–	249	277	–	–	–	–	256	558	389	–	–	7	–	–	216	166	–	–	–	–	188
Obstructing the Collector's officers in execution of their duty	1	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Violation of duty, &c. by police officers	36	46	–	–	15	8	–	11	12	–	–	–	–	–	16	14	–	–	5	3	–	2	4	–	–	–	–	–
Neglecting to obey magistrates' summons, &c.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–	–	–	2	–	–	–	–	–	–
Breaches of the Salt Laws	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	3	–	–	–	–	–	–	3	–	–	–	–	–
Breaches of Act X. of 1841 (Registry of Shipping)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Breaches of Small Cause Court Act, No. IX. of 1850	1	2	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Breach of Apprentice Act, No. XIX. of 1850	1	1	–	–	–	1	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Breaches of Abkarry Act, No. XIX. of 1852	35	40	–	–	–	–	–	28	12	–	–	–	–	–	34	58	–	–	–	–	–	23	35	–	–	–	–	–

(F.)—General Comparative Statement of Cases committed for Trial to the Criminal Sessions, and of those summarily disposed of by the Magistrates during the Year 1861—*continued.*

OFFENCES.	1 8 6 0.														1 8 6 1.													
	1. Number of Cases.	2. Number of Persons.	3. Sentenced to Death.	4. Transportation.	5. Imprisonment with Hard Labour.	Simple Imprisonment.	7. Flogged.	8. Fined.	9. Acquitted.	10. Dismissed the Service.	11. Reduced.	12. Suspended.	13. Sent on Board Ship.	14. Compromised or Dismissed for Default.	1. Number of Cases.	2. Number of Persons.	3. Sentenced to Death.	4. Transportation	5. Imprisonment with Hard Labour.	6. Simple Imprisonment.	7. Flogged.	8. Fined.	9. Acquitted.	10. Dismissed the Service.	11. Reduced.	12. Suspended.	13. Sent on Board Ship.	14. Compromised or Dismissed for Default.
Breaches of Post-office Act, No. XVII. of 1854 - - - - - - -	1	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Breaches of Railway Act, No. XVIII. of 1854 - - - - - - -	20	26	–	–	1	–	–	18	7	–	–	–	–	–	4	7	–	–	–	–	–	6	1	–	–	–	–	–
Breaches of Conservancy Act, No. XIV. of 1856 - - - - - - -	524	559	–	–	–	–	–	159	400	–	–	–	–	–	382	434	–	–	–	–	–	199	235	–	–	–	–	20
Breaches of Wheel Tax Act, No. XXVI. of 1856 - - - - - - -	6	6	–	–	–	–	–	5	1	–	–	–	–	–	11	13	–	–	–	–	–	8	5	–	–	–	–	–
Breaches of Marine Police Act, No. XXVIII. of 1858 - - - -	4	4	–	–	–	–	–	3	1	–	–	–	–	–	3	3	–	–	–	–	1	2	–	–	–	–	–	–
Breaches of Contract Act, No. XIII. of 1859 - - - - - - -	*209	138	–	–	13	–	–	1	98	–	–	–	–	144	69	*47	–	–	2	–	–	6	29	–	–	–	–	46
Breaches of Arms Act, No. XXXI., of 1850	7	12	–	–	–	–	–	7	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Preferring charges on insufficient grounds -	102	100	–	–	–	–	–	97	3	–	–	–	–	2	34	34	–	–	–	–	–	25	9	–	–	–	–	–
Offences under the Merchant Shipping Act and Act I. of 1859 - - - -	35	101	–	–	58	1	–	–	40	–	–	–	2	9	64	135	–	–	91	–	–	16	23	–	–	–	5	2
Offences against Boat Act, No. IV. of 1842	23	27	–	–	–	–	6	1	20	–	–	–	–	3	13	35	–	–	–	–	24	2	9	–	–	–	–	4
Breaches of discipline and minor offences committed by police officers, and disposed of by the Commissioner of Police	2,090	2,389	–	–	–	–	–	2,090	208	13	16	62	–	–	1,791	1,998	–	–	–	–	–	1,454	493	17	12	22	–	–
GRAND TOTAL - - -	22,211	25,526	–	12	980	61	99	16,870	7,085	13	16	62	2	4,531	20,304	24,282	4	16	1,176	44	469	16,026	6,481	17	12	22	5	2,173

* Of these, 10 persons were ordered to fulfil their Contracts.

	Amount of Property said to have been Stolen.	Amount of Property Recovered.
	Rs. *a.* *p.*	*Rs.* *a.* *p.*
1860 - - - - - - -	38,265 5 6	13,900 5 4
1861 - - - - - - -	35,613 15 4	12,210 11 1

(G.)—STATEMENT showing the SUMS realised, during the Year 1861, by Fines, Summons Fees, Sale Proceeds of Unclaimed Property, Fees on Licenses, Rent of Government Grazing Grounds, and Monies found by Police Officers in Gambling Places.

1861.	Town Police Court.		Vepery Police Court.		Royapet Police Court.		Sale Proceeds of Unclaimed Property.	Fees on Licenses.	Summons Fees.	Rent of Government Grazing Grounds.	Amount found by Police Officers in Gambling Places.	TOTAL.
	Fines	Summons Fees.	Fines.	Summons Fees.	Fines.	Summons Fees.						
	Rs. a. p.	Rs. a. p.	Rs, a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
January -	682 14 –	78 12 –	131 8 –	40 – –	369 4 –	30 12 –	– –	9 – –	– –	2 13 –	10 10 –	1,355 9 –
February -	582 10 –	96 12 –	168 6 –	45 8 –	290 – –	55 12 –	– –	7 – –	– –	– –	5 4 10	1,255 4 10
March - -	565 4 –	137 – –	254 1 –	64 4 –	269 12 –	60 – –	– –	9 – –	– –	– –	2 14 4	1,382 3 4
April - -	509 12 –	155 – –	358 14 –	81 12 –	431 14 –	113 – –	– –	7 2 –	– –	– –	– 8 9	1,657 12 9
May - -	625 4 –	157 12 –	373 2 –	129 4 –	349 8 –	105 12 –	– –	7 – –	– –	– –	2 3 7	1,749 13 7
June - -	821 8 –	146 8 –	260 14 –	102 – –	508 – –	79 12 –	– –	7 – –	– 4 –	– –	1 5 5	1,927 3 5
July - -	803 – –	145 – –	331 12 –	149 4 –	385 4 –	74 – –	– –	228 – –	– 12 –	18 – –	– –	2,135 – –
August - -	565 2 –	121 8 –	267 4 –	93 12 –	347 12 –	74 8 –	– –	233 – –	– 8 –	80 8 –	6 1 9	1,789 15 9
September -	1,152 14 –	114 4 –	529 4 –	98 4 –	557 12 –	73 8 –	– –	25 – –	– 12 –	– –	27 5 7	2,578 15 7
October - -	574 12 –	124 – –	809 6 –	111 12 –	483 4 –	66 – –	– –	12 – –	– –	105 – –	14 10 10	2,300 12 10
November -	478 12 –	113 – –	245 – –	92 8 –	496 12 –	69 8 –	– –	10 – –	1 12 –	– –	4 10 10	1,511 14 10
December -	1,164 12 –	113 12 –	401 – –	105 – –	414 12 –	58 12 –	439 5 2	15 – –	1 4 –	13 13 –	87 15 1	2,815 5 3
TOTAL - Rs.	8,546 8 –	1,503 4 –	4,130 7 –	1,113 4 –	4,903 14 –	865 4 –	439 5 2	569 – –	5 4 –	220 2 –	163 11 –	22,459 15 2

Madras, Police Commissioner's Office,
28 April 1862.

W. J. Wilson,
Commissioner of Police.

ANNUAL STATEMENT of the MADRAS PENITENTIARY, from 1st January to 31st December 1861. inclusive of Prisoners received from the Mofussil.

	Europeans.		East Indians.		Natives.		TOTAL.
	Males.	Females.	Males.	Females.	Males.	Females.	
Remaining on the 31st December 1860 -	27	– –	–	– –	212	28	267
Admitted during the last 12 months -	119	2	24	5	1,139	168	1,457
Discharged - - - - - - -	118	2	22	5	1,039	162	1,348
Died - - - - - - -	–	– –	–	– –	13	2	15
Remaining on the 31st December 1861 -	28	– –	2	– –	289	32	351
						TOTAL - - -	3,438

Average daily number of Prisoners during the Year - - 287

SENTENCES.	Europeans.		East Indians.		Natives.		TOTAL.
	Males.	Females.	Males.	Females.	Males.	Females.	
Transportation for life - - - -	2	– –	–	– –	37	4	43
Ditto - for 20 years - - -	–	– –	–	– –	3	– –	3
Ditto - for 14 years - - -	3	– –	–	– –	–	– –	3
Ditto - for 7 years - - -	1	– –	1	– –	10	– –	12
Ditto - for 4 years - - -	5	– –	–	– –	3	– –	8
Imprisonment with hard labour for three years.	–	– –	–	– –	1	– –	1
Imprisonment with hard labour for two years.	1	– –	–	– –	37	1	39
Ditto from one year up to two years -	1	– –	4	– –	29	4	38
Ditto from six months up to one year -	7	– –	2	– –	155	14	178
Ditto from one month up to six months	13	1	4	2	561	74	655
Ditto under one month - - -	82	– –	11	1	274	66	434
Simple imprisonment for six months -	–	– –	–	– –	1	– –	1
Ditto - - for three months -	–	– –	–	– –	2	1	3
Ditto - - for one month - -	1	– –	–	2	9	2	14
Ditto under one month - - -	3	1	2	– –	17	2	25
TOTAL - - -	119	2	24	5	1,139	168	1,457

Chap. X.
Madras.

Annual Statement of the Madras Penitentiary, from 1st January to 31st December 1861, &c.—*continued.*

Memorandum.

	Rs.	*a.*	*p.*
Realised by sale of ropes made in the Penitentiary	213	10	6
Estimated value of valises, &c., made up for the Arsenal	381	15	–
Estimated cost of labour for public works, calculated at 1½ anna* a day per man	3,882	6	–
Total - - - *Rs.*	4,477	15	6

Hospital Return.

Remaining on the 31st December 1860	17	307
Admitted during the last twelve months	290	
Discharged, being cured, during the last twelve months	277	
Died during the last twelve months	15	
Remaining on the 31st December 1861	15	
	307	

DISEASES.	Admissions.	Deaths.
Fevers	53	2
Cholera	8	7
Dysentery, acute and chronic	31	1
Diarrhœa	42	2
Other diseases of stomach and bowels	37	—
Diseases of lungs	12	1
Diseases of brain	5	—
Rheumatic affection	14	—
Venereal affection	30	1
Atrophia, or wasting	2	—
Anasarca	1	—
Other diseases	55	1
Total - - - -	290	15

Madras, Police Commissioner's Office,
28 April 1862.

(signed) *W. J. Wilson,*
Commissioner of Police.

Coroner's Inquests.

A Comparative Statement of Coroner's Inquests held in *Madras* during the Years 1860 and 1861.

VERDICTS AND CAUSES OF DEATH.		1860.	1861.	Increase.	Decrease.
Homicide.	Murder	2	2	—	—
	Manslaughter	2	1	- -	1
Felo-de-se.	Drowning	7	7	—	—
	Cutting the throat	1	- -	- -	1
	Hanging	- -	2	2	—
Suicide while temporarily insane	Drowning	12	15	3	—
	Pistol-shot	1	- -	- -	1
	Hanging	1	1	—	—
Accidental death	Drowning	34	28	- -	6
	Burning	2	4	2	—
	Boat forced against deceased	11	- -	- -	11
	Fall of a tree	- -	1	1	—
	Fall of a pole	2	2	—	—
	Fall of a building	3	2	- -	1
	Fall of a mud wall	- -	2	2	—
	Passage of a carriage wheel	4	5	1	—
	Passage of a railway carriage wheel	- -	3	3	—
	Shaft of a carriage	2	- -	- -	2
	Fall from a height	1	3	2	—
	Boat-oar striking forehead	1	- -	- -	1
	Boat breaking in the surf	- -	3	3	—
	Blow on head from axe	1	- -	- -	1
	Iron rail falling	- -	1	1	—
	Fall from ship's yard	3	- -	- -	3
	Knocked down by a horse	1	1	—	—
	Fracture of skull by striking against the bracket of a well	- -	1	1	—
	Overturning of a carriage	1	- -	- -	1
	Yoke of a bullock-cart striking	- -	1	1	—
	Gunshot wound	- -	1	1	—
	Locked-jaw from wound	- -	7	7	—

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* N.B.—The average hire of a daily labourer is three annas.

STATEMENT of Coroner's Inquest, held in Madras, during the Years 1860 and 1861—*continued.*

VERDICTS AND CAUSES OF DEATH.		1860.	1861.	Increase.	Decrease.
Death from natural causes - - -	Disease of the heart - - - - -	4	9	5	—
	Diarrhœa - - - - - -	3	5	2	—
	Apoplexy - - - - - -	8	2	- -	6
	Inflammation of the bowels - - -	1	- -	- -	1
	Cholera - - - - - - -	14	10	- -	4
	Retention of urine - - - - -	- -	1	1	—
	Epilepsy - - - - - - -	- -	2	2	—
	Abscess of the liver - - - - -	1	1	- -	—
	Fever - - - - - - -	3	4	1	—
	Dropsy - - - - - - -	2	2	—	—
	Disease of the kidney - - - -	1	- -	- -	1
	Disease of the lungs - - - - -	- -	3	3	—
	Dysentery - - - - - -	2	2	—	—
	Congestion of the brain - - - -	- -	1	1	—
Death from violent causes unknown -	Injury to the brain - - - - -	2	1	- -	1
	Inflammation of womb - - - -	1	- -	- -	1
Miscellaneous - -	From poison - - - - - -	1	- -	- -	1
	From wound of tongue inflicted in performance of a vow.	- -	1	1	—
	From shark bite - - - - -	- -	2	2	—
	From snake-bite - - - - -	- -	2	- -	2
	From excessive drinking - - - -	- -	1	1	—
	From wounds inflicted by a cheeta - -	- -	2	2	—
	From want of common necessaries of life -	- -	1	1	—
Causes unknown -	Found drowned - - - - -	14	17	3	—
	Found dead - - - - - -	10	8	- -	2
	TOTAL - - -	163	170	55	48

Total Inquests in 1860 - - - 163
Total Inquests in 1861 - - - 170
Increase in 1861 - - - - - 7

Madras, Coroner's Office,
31 January 1862.

(signed) *J. Urquhart,*
Coroner.

MONTHLY NUMBER of DEATHS within the Jurisdiction of the Supreme Court of *Madras*, for 1861.

MONTHS.	Males.	Females.	Children under 12 Years of Age.	TOTAL.	Cholera cases.
January - - - - - - -	293	273	376	942	34
February - - - - - - -	233	251	348	832	76
March - - - - - - -	268	255	367	890	54
April - - - - - - - -	266	240	394	900	151
May - - - - - - - -	247	257	365	869	203
June - - - - - - - -	263	203	311	777	76
July - - - - - - - -	223	238	388	849	183
August - - - - - - -	224	253	408	885	599
September - - - - - - -	269	257	433	959	786
October - - - - - - -	288	290	372	950	346
November - - - - - - -	277	276	324	877	107
December - - - - - - -	306	223	335	872	161
GRAND TOTAL - - -	3,157	3,024	4,421	10,602	2,776

(signed) *W. R. Cornish,*
Secretary, Principal Inspector General Medical Department.

Office of Principal Inspector General Medical Department,
Fort Saint George, 25 April 1862.

(A true Copy.)

(signed) *B. Cardozo,*
First Municipal Commissioner for the Town of Madras.

APPENDIX No III.

SUMMARY of RETURNS received from the several GAOLS under the Presidency of Fort St. George, for the official Year 1861–62.

GAOLS.	Number in Prison on the 30th April 1862.							Number of Convicts now in Gaol who can Read and Write.	Deaths during the Year.	Escapes and Re-apprehension.		Average Number of Prisoners in Gaol during the Year.	Cost of Fixed Establishments.	Cost of Extra Establishment.	Cost of Diet.	Cost of Clothing and Bedding.	Cost of Buildings and Sundries.	Total Expenses for the Year.	Average Cost of each Prisoner for Diet for the Year.	Average Cost of each Prisoner for Clothing, and Bedding for the Year.	Average Cost of each Prisoner on Total Expenses of the Year.	Monthly Cost Guarding.	——
	Convicts.	On Security.	Committed, and under Trial.	State Prisoners.	Debtors.	Insane.	TOTAL.			Escapes.	Re-apprehension.												
													Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Itchapore - - -	57	22	-	-	5	-	84	-	-	1	1	81	477 9 7	506 8 6	1,054 12 6	97 11 10	57 8 2	2,284 14 9	13 - 4	1 3 3	23 8 8	—	
Chicacole - - -	149	16	-	3	3	-	171	32	14	-	-	170	2,004 - -	698 2 5	4,444 9 6	198 15 2	58 5 7	7,861 15 2	26 2 3	1 2 8	46 1 -	268 8 -	
Vizagapatam - -	197	8	-	-	-	3	208	-	57	1	1	156	1,787 14 6	86 4 -	4,514 3 6	366 11 11	737 15 3	8,180 5 3	28 14 11	2 5 7	52 7 -	374 3 1	
Rajahmundry -	184	3	-	2	1	1	191	-	12	1	1	164	1,729 11 8	366 10 1	4,442 12 2	216 12 1	69 9 3	7,496 13 10	27 1 5	1 5 1	45 11 5	283 8 -	
Ditto magistrate -	10	-	-	-	-	-	10	-	1	-	-	9	- -	122 14 6	169 4 5	6 9 -	7 15 5	325 8 5	18 12 8	- 11 8	36 2 8	—	
Masulipatam - -	76	9	1	2	2	1	91	18	7	-	-	86	2,583 14 10	1,183 7 8	2,402 7 5	258 4 -	61 8 11	7,057 7 6	27 14 11	3 - 8	82 1 -	- -	
Guntoor - - -	182	8	16	4	2	4	216	22	7	-	-	170	2,049 - -	2,433 5 8	3,900 10 8	265 10 11	31 3 9	9,034 14 2	22 15 1	1 9 -	53 2 4	- -	Taken charge on 1 April 1862.
Nellore - - -	282	20	17	6	-	1	326	23	7	-	-	307	2,326 5 3	95 14 -	7,983 5 11	610 14 5	78 15 5	11,985 14 6	26 - 1	1 15 10	39 - 8	427 8 -	
Kurnool - - -	130	11	24	-	4	1	170	10	10	-	-	150	1,282 13 7	45 - -	3,231 1 -	316 2 -	57 1 7	5,230 9 8	21 8 7	2 1 8	34 13 11	218 8 -	
Cuddapah - - -	379	44	8	2	3	1	437	-	28	-	-	402	2,891 - -	- -	10,122 - 11	595 6 4	119 12 11	15,258 6 7½	25 2 10	1 7 8	37 15 6	501 - -	
Bellary - - -	331	35	99	5	5	1	476	16	35	-	-	428	3,036 3 2	- -	7,847 11 1	404 1 3	36 11 2	12,372 15 1	18 5 2	- 15 1	28 14 6	375 4 -	
Chittoor - - -	441	13	23	-	9	-	486	40	45	2	-	501	2,534 7 10	- -	11,810 1 2	698 3 3	273 4 -	16,172 3 -	22 13 2	1 6 3	32 4 5	593 8 11	
Vellore - - -	180	-	-	-	-	-	180	28	5	-	-	179	1,160 9 2	- -	4,840 13 3	475 10 3	228 13 5	6,852 15 5	27 - 8	2 10 6	38 4 6	205 4 -	
Chingleput - - -	342	4	-	1	8	-	355	37	8	-	-	319	2,545 - -	2 5 6	12,698 7 11	906 5 3	555 3 -	19,451 7 -	39 12 9	2 13 5	60 15 11	370 8 -	
Guindy - - -	110	-	-	-	-	-	110	15	18	-	-	124	969 - -	107 6 4	4,689 5 9	332 7 9	129 6 7	6,626 9 2	37 13 -	2 10 10	53 7 -	199 4 -	
Cuddalore - - -	303	9	4	1	5	4	326	50	37	1	1	384	2,532 15 8	- -	10,544 14 4	756 5 7	42 5 3	14,532 9 7	27 4 4	1 15 6	37 14 2	506 - 7	
Combaconum - -	23	2	10	-	6	-	41	-	9	-	-	95	2,093 10 2	84 - -	3,040 4 5¾	239 8 5½	47 9 11	5,735 12 5	32 - 8	2 8 4	60 6 -	156 12 -	
Tanjore magistrate -	73	-	-	-	-	-	73	15	5	-	-	86	- -	384 - -	2,886 3 6	60 13 9	843 3 1	4,294 7 0	33 8 11	- 11 3	49 14 6	105 8 -	
Tranquebar - -	148	8	4	1	8	1	165	45	3	-	-	93	1,812 4 1	35 - -	3,348 4 9	182 3 6	38 10 5	5,917 8 -	36 - 8	1 15 4	63 9 4	142 4 -	
Trichinopoly - -	364	30	-	2	4	-	400	-	16	-	-	324	2,124 - -	126 - -	9,886 1 10½	459 9 1	374 7 3	13,204 - 7	30 8 2	1 6 8	40 12 -	482 - -	
Madura - - -	200	9	9	-	10	-	228	52	30	-	-	191	2,427 - -	- -	5,850 3 1	360 7 9	61 4 -	9,200 4 -	30 10 -	1 14 2	48 4 8	242 8 -	
Paumben - - -	148	-	-	-	-	-	148	29	14	-	-	141	1,258 7 8	402 4 10	3,740 12 6	415 5 11	21 - 8	6,179 9 4	26 9 7	2 15 -	43 13 2	229 8 -	
Tinnevelly - - -	185	2	14	-	2	-	203	24	26	-	-	170	1,818 14 -	266 9 2	4,407 12 11	294 4 2	47 9 8	7,647 7 5	25 14 5	1 11 8	44 11 7	227 8 -	
Ditto magistrate -	22	-	-	-	-	-	22	-	1	-	-	22	- -	189 - -	294 2 3	3 13 10	- -	518 - 9	13 5 11	- 2 9	23 8 9	—	
Salem - - -	404	29	6	-	7	3	442	-	8	1	1	354	2,093 5 1	- -	7,882 10 3½	866 9 4	37 6 -	12,497 7 8½	22 4 3	2 7 2	32 7 7	416 12 -	
Coimbatore - -	363	22	36	-	14	3	438	-	31	-	-	412	2,312 15 2	- -	12,904 15 6	710 15 -	326 15 2	17,021 - 8	31 5 1	1 11 7	41 5 1	483 8 -	
Ootacamund - -	110	2	2	-	1	-	124	26	5	-	-	134	1,598 2 4	- -	5,956 7 9½	599 15 -	762 1 3	9,458 10 3¼	44 7 2	4 7 7	70 9 4	209 8 -	
Cochin - - -	44	-	-	-	-	-	44	6	-	-	-	49	499 - -	- -	1,712 12 5	46 - 9	41 9 10	2,408 13 10	34 15 3	- 15 -	49 2 6	71 8 -	
Calicut - - -	408	4	21	-	8	-	441	64	101	1	1	405	2,900 15 -	5,246 9 11	13,256 12 1	563 8 8	115 4 -	23,374 - 1	32 11 8	1 6 3	57 11 5	—	
Tellicherry - -	143	13	12	-	4	3	175	37	30	-	-	138	1,486 6 6	- -	5,107 9 10	277 9 8	88 7 -	7,405 5 10	37 - 1	2 - 1	53 10 7	219 - -	
Cannanore - -	74	-	-	-	-	-	74	4	11	-	-	70	646 6 4	- -	2,343 4 -	190 15 -	48 6 8	3,635 6 1	33 7 2	2 11 7	51 14 11	95 12 -	
Mangalore - - -	240	3	5	-	26	2	276	-	20	-	-	225	2,417 3 11	- -	6,772 9 1	333 9 3	73 7 10	10,223 3 7	30 1 7	1 7 8	45 6 11	353 - -	
Honore - - -	105	5	5	-	3	4	122	4	21	-	-	148	1,498 1 11	- -	3,630 14 5¾	200 6 11	184 3 1	5,977 4 9¾	24 8 6	1 5 8	40 6 2	264 - -	
TOTAL - - -	6,416	319	316	29	140	33	7,253	597	612	8	6	-	56,897 5 5	12,381 6 7	28,77,518 6 3	12,301 15 -½	5,577 5 6	2,95,424 - 3¼	- -	- -	- -	8,022 - 7	
European prison at Ootacamund - -	-	-	-	-	-	-	-	-	-	-	-	-	1,046 11 6	- -	261 4 7	1,020 14 10	48 2 8	2,690 4 8	- -	- -	- -	- -	For February, March and April 1862.
GRAND TOTAL - -	6,416	319	316	29	140	33	7,253	597	612	8	6	-	57,944 - 11	12,381 6 7	2,87,779 10 10	13,321 13 10½	5,625 8 2	2,98,114 4 11¼	- -	- -	- -	8,022 - 7	

CHAP. X.
Madras.

APPENDIX No. IV

(A.)—STATEMENT showing the Cultivation in the several Districts under the Madras Presidency, for the Official Year 1861-1862.

DISTRICTS.	WET.		DRY.		GARDEN.		TOTAL 1861-62.		1860-61.		COMPARISON.			
											Increase.		Decrease.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
1 Ganjam - - -	1,67,770	4,79,580	93,113	1,18,650	2,095	7,132	2,62,978	6,05,362	2,50,324	5,68,789	12,654	36,573	—	—
2 Vizagapatam - -	14,113	1,20,663	11,566	48,519	40	114	25,719	1,69,296	25,446	1,65,977	273	3,319	—	—
3 Godavery District -	1,31,634	6,38,479	2,42,333	10,21,393	2,670	15,805	3,76,637	16,75,677	3,74,314	16,77,848	2,323	- -	- -	2,171
4 Kistna District -	1,56,710	6,40,777	13,25,683	19,32,186	10,385	47,655	14,92,778	26,20,618	14,67,824	25,33,083	24,954	87,535	—	—
5 Nellore - - -	1,00,948	5,52,019	3,95,894	5,55,351	21,775	1,28,723	5,18,617	12,36,093	5,08,769	11,90,244	9,848	45,849	—	—
6 Cuddapah - -	91,429	7,40,080	9,76,051	7,59,451	45,530	2,90,155	11,13,013	17,89,686	11,00,604	17,76,179	12,409	13,507	—	—
7 Bellary - - -	1,55,477	8,41,818	21,21,303	12,98,593	- -	- -	22,76,780	21,40,411	21,19,655	21,07,070	1,57,125	33,341	—	—
8 Kurnool - - -	20,474	2,23,531	10,50,915	11,32,172	13,898	90,269	10,85,287	14,45,972	10,48,151	13,84,743	37,136	61,229	—	—
9 Madras - - -	1,97,749	8,96,710	98,314	1,56,481	1,360	6,090	2,97,423	10,59,281	2,83,570	10,51,290	13,853	7,991	—	—
10 North Arcot - -	1,78,956	10,95,001	3,72,669	5,48,798	- -	- -	5,51,625	16,43,802	5,29,099	15,94,664	22,526	49,138	—	—
11 South Arcot - -	2,67,335	15,13,326	7,39,264	14,52,815	3,711	20,261	10,10,310	29,86,312	9,60,433	29,52,485	49,877	33,827	—	—
12 Tanjore - - -	7,13,804	35,73,397	1,64,625	2,22,536	36,880	1,32,311	9,15,309	39,28,244	8,81,228	38,34,614	34,081	93,630	—	—
13 Trichinopoly - -	1,49,012	7,71,991	4,81,592	6,23,868	40,383	1,21,999	6,70,987	15,17,858	6,05,105	14,45,546	65,882	72,312	—	—
14 Madura - - -	1,11,249	5,24,134	4,63,385	6,17,846	27,430	85,983	6,02,064	12,27,963	5,86,016	11,96,295	16,048	31,668	—	—
15 Tinnevelly - -	2,20,346	15,71,266	6,90,258	5,57,667	17,942	41,021	9,28,546	21,69,954	8,58,050	19,10,482	70,496	2,59,472	—	—
16 Coimbatore - -	65,334	5,00,135	11,45,674	10,43,018	1,34,173	4,09,569	13,45,181	19,52,722	14,68,901	20,61,206	- -	- -	1,23,720	108,484
17 Salem - - -	59,845	4,55,865	9,01,052	13,02,986	14,930	85,810	9,75,827	18,44,661	9,56,453	17,80,537	19,374	64,124	—	—
18 North Canara - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19 South Canara - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20 Malabar - - -	- -	12,19,616	- -	70,267	- -	4,58,320	- -	17,48,203	- -	17,08,782	- -	39,421	—	—
TOTAL - -	28,02,185	1,63,58,301	1,12,73,694	1,34,62,597	3,73,202	19,41,217	1,44,49,081	3,17,62,115	1,40,24,242	3,09,39,834	5,48,559	9,32,936	1,23,720	1,10,655
									NET - - -		4,24,839	8,22,281		

(B.)—Statement showing the Prices of Grain and other chief Articles of Produce in the several Districts under the Madras Presidency, for the official Year 1861–62, compared with 1860–61.

	DISTRICTS.	Rice, 1st Sort per Garce.		Rice, 2d Sort.		Paddy, 1st Sort.		Paddy, 2d Sort.		Cholum.		Cumboo.		Raggy.		Varagu.	
	1	1860–61. 2	1861–62. 3	1860–61. 4	1861–62. 5	1860–61. 6	1861–62. 7	1860–61. 8	1861–62. 9	1860–61. 10	1861–62. 11	1860–61. 12	1861–62. 13	1860–61. 14	1861–62. 15	1860–61. 16	1861–62. 17
		Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1	Ganjam - -	239	278	217	256	89	107	83	101	130	130	102	122	115	118	–	–
2	Vizagapatam -	257	317	235	294	105	132	96	120	110	136	107	136	111	131	69	111
3	Godavery District -	211	275	201	261	95	127	90	119	101	142	87	105	96	126	94	118
4	Kistna District -	285	319	266	300	122	141	114	132	129	149	128	139	110	135	86	118
5	Nellore - -	280	320	250	290	134	152	119	139	163	177	138	153	138	152	89	94
6	Cuddapah - -	399	441	356	390	177	196	162	17	215	220	207	208	204	200	175	180
7	Bellary - -	356	373	326	338	160	188	147	170	167	160	174	159	164	142	151	147
8	Kurnool - -	393	392	345	350	168	162	150	151	176	165	190	163	165	154	–	–
9	Madras - -	349	398	324	366	148	174	137	164	176	218	177	202	192	220	90	110
10	North Arcot - -	341	382	303	354	153	169	144	160	158	239	160	200	184	211	106	105
11	South Arcot -	291	355	267	326	130	160	122	149	172	172	156	180	151	183	143	155
12	Tanjore - -	292	342	263	318	133	153	123	–	168	177	137	155	134	153	86	92
13	Trichinopoly -	348	405	335	392	148	177	142	171	186	222	171	191	165	184	97	119
14	Madura - -	357	416	336	393	164	191	154	177	103	232	143	176	166	192	107	124
15	Tinnevelly - -	421	415	384	354	188	189	185	161	186	192	191	191	171	186	124	135
16	Coimbatore - -	439	455	396	406	198	207	182	188	189	203	146	166	158	182	131	154
17	Salem - - -	376	388	343	356	172	188	156	164	200	198	181	179	190	191	107	109
18	North Canara -	358	344	314	304	151	114	138	133	170	210	–	–	165	183	–	262
19	South Canara -	357	272	322	256	–	–	149	121	–	–	–	–	212	178	–	–
20	Malabar - -	404	387	365	354	186	174	170	172	224	–	247	–	200	221	–	–
	Average - - -	338	364	307	333	148	163	138	151	164	186	158	167	160	172	110	133

	DISTRICTS.	Horse Gram.		Ullundu.		Wheat.		Gingley Oil Seeds		Lamp Oil Seeds.		Salt.		Cotton per Candy.		Indigo per Candy.		Sugar per Candy.	
		1860–61. 18	1861–62. 19	1860–61. 20	1861–62. 21	1860–61. 22	1861–62. 23	1860–61. 24	1861–62. 25	1860–61. 26	1861–62. 27	1860–61. 28	1861–62. 29	1860–61. 30	1861–62. 31	1860–61. 32	1861–62. 33	1860–61. 34	1861–62. 35
		Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1	Ganjam - -	135	170	250	243	264	237	298	320	240	295	208	250	59	100	700	720	65	80
2	Vizagapatam -	126	140	266	246	327	253	291	320	232	280	191	245	60	66	800	771	80	76
3	Godavery District	136	150	309	273	342	336	290	350	224	266	181	238	60	60	780	800	90	90
4	Kistna District -	165	161	284	300	372	387	261	312	182	204	195	227	50	50	800	880	35	30
5	Nellore - -	193	218	332	376	424	441	327	346	239	244	178	218	61	61	72	1,072	83	92
6	Cuddapah - -	225	226	450	429	417	441	–	–	267	257	258	301	67	74	891	1,020	70	80
7	Bellary - -	178	172	320	314	326	341	–	–	255	250	344	362	65	74	910	1,000	62	74
8	Kurnool - -	208	183	332	310	387	363	291	308	240	264	283	308	18	31	875	906	78	83
9	Madras - -	244	235	342	386	460	451	–	–	–	–	160	201	–	–	–	–	–	–
10	North Arcot -	223	205	339	393	510	476	372	379	216	289	187	222	90	90	720	770	90	100
11	South Arcot -	237	239	350	409	563	564	414	412	261	251	182	219	86	88	500	656	35	41
12	Tanjore - -	231	252	290	422	538	595	491	444	278	323	168	208	22	21	284	204	35	37
13	Trichinopoly -	219	266	328	475	555	716	565	500	276	335	253	288	40	40	780	700	40	40
14	Madura - -	166	251	242	471	518	570	594	402	287	302	193	234	–	–	68	68	38	38
15	Tinnevelly - -	210	273	312	545	546	635	596	417	302	318	183	334	25	28	60	80	80	80
16	Coimbatore - -	181	266	338	457	483	537	502	483	220	367	300	333	22	25	869	1,000	37	38
17	Salem - - -	201	202	292	352	467	470	–	–	–	–	224	248	100	100	–	1,000	–	–
18	North Canara -	209	248	265	288	255	267	–	–	–	–	190	231	73	105	–	–	90	85
19	South Canara -	242	276	283	290	365	350	–	–	–	–	184	211	–	–	–	–	–	–
20	Malabar - -	407	452	339	423	383	419	429	506	415	377	253	286	102	87	806	849	112	83
	Average - -	207	229	313	370	425	442	381	393	258	289	216	253	59	65	622	735	66	67

(C.)—Statement showing the Collections of all Sources of Revenue in the several Districts of the Madras Presidency for the Official Year 1861-62, compared with 1860-61.

	DISTRICTS.	Land Revenue.				Abkarry.		Salt.		Sea Customs.		Moturpha.		Stamps.	
		1860-61.	1861-62.	Increase.	Decrease.	1860-61.	1861-62.	1860-61.	1861-62.	1860-61.	1861-62.	1860-61.	1861-62.	1860-61.	1861-62.
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
		Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1	Ganjam - - - -	10,72,923	10,57,450	- -	15,473	65,565	82,890	8,25,533	9,78,499	1,08,696	59,858	15,965	2,758	31,793	59,926
2	Vizagapatam - - -	12,63,504	12,89,049	25,545	- -	66,517	68,215	2,14,826	2,96,924	24,818	34,092	29,189	13,277	26,068	65,271
3	Godavery District - -	34,21,461	31,86,653	- -	2,34,808	1,33,518	1,30,617	3,08,494	2,78,170	1,26,111	75,869	61,256	5,911	69,369	1,30,626
4	Kistna ditto - - -	27,77,590	30,14,035	2,36,445	- -	1,01,540	94,830	6,70,517	7,34,295	6,212	11,793	49,028	14,363	36,776	82,210
5	Nellore - - - -	18,25,625	19,67,372	1,41,747	- -	34,170	47,421	8,65,727	8,71,714	2	316	14,870	9,360	32,873	90,750
6	Cuddapah - - -	17,35,080	20,05,510	2,70,430	- -	1,00,254	1,19,456	- -	- -	- -	- -	88,797	25,076	31,138	1,10,220
7	Bellary - - - -	19,65,941	22,42,545	2,76,604	- -	2,63,703	3,39,001	- -	- -	- -	- -	1,38,484	26,324	46,954	1,19,542
8	Kurnool - - - -	13,51,498	14,97,135	1,45,637	- -	1,19,205	1,52,403	- -	- -	- -	- -	92,519	11,402	18,742	56,932
9	Madras - - - -	13,51,792	13,06,367	- -	45,425	10.64,089	9,73,991	10,62,986	15,70,466	- -	- -	32,672	23,527	90,025	1,69,803
10	North Arcot - - -	19,73,265	21,38,331	1,65,066	- -	1,77,175	1,60,396	- -	- -	- -	- -	37,230	26,024	66,113	1,61,226
11	South Arcot - - -	24,76,844	26,08,557	1,31,713	- -	1,33,622	1,75,546	3,92,837	4,38,021	42,465	45,013	41,631	27,196	74,177	1,08,004
12	Tanjore - - - -	47,63,194	44,22,736	- -	3,40,158	2,17,261	3,15,971	7,09,612	8,59,851	5,25,191	3,12,379	41,156	3,600	2,15,120	3,74,521
13	Trichinopoly - - -	15,24,251	15,35,110	10,859	- -	23,078	35,425	- -	- -	- -	- -	7,632	10,344	50,342	99,421
14	Madura - - - -	20,06,612	20,06,226	- -	386	85,785	85,866	4,11,130	6,23,607	27,971	39,983	262	1,605	91,445	2,10,995
15	Tinnevelly - - -	25,75,242	28,37,774	2,62,532	- -	38,706	51,910	4,59,196	5,83,403	41,199	47,375	93,135	25,327	90,383	1,31,784
16	Coimbatore - - -	23,96,076	21,46,621	- -	2,49,455	1,33,799	1,56,665	- -	- -	- -	- -	61,683	39,828	44,736	1,08,159
17	Salem - - - -	20,01,515	23,20,381	3,18,866	- -	1,39,142	1,31,866	- -	- -	- -	- -	71,249	6,701	54,869	1,31,087
18	North Canara - - -	10,96,126	8,93,482	- -	2,02,644	45,775	55,724	2,87,762	3,16,053	19,491	18,978	7,199	7,188	37,556	90,145
19	South Canara - - -	10,87,055	11,85,816	98,761	- -	40,161	47,753	2,89,927	3,94,126	45,052	37,965	8,516	6,411	77,447	1,65,776
20	Malabar - - - -	17,33,795	17,57,729	23,934	- -	86,823	1,02,858	5,61,923	6,52,989	1,37,749	1,09,991	1,15,563	25,232	2,07,046	1,88,178
	Sea Customs, Madras -	- -	- -	- -	- -	- -	- -	- -	- -	15,96,541	13,41,742	- -	- -	- -	—
	TOTAL - - *Rs.*	4,03,99,389	4,14,18,879	21,08,139	10,88,619	30,72,921	33,28,807	70,60,770	86,01,418	27,01,861	21,35,384	10,08,339	3,11,514	13,95,972	29,54,576
			Net - - - *Rs.*	10,19,490											

(C.)—Statement showing the Collections of all Sources of Revenue in the several Districts of the Madras Presidency, for the Official Year 1861-62, compared with 1860-61—*continued.*

	DISTRICTS.	Frontier Duty.		Income Tax.		Total Sundry Sources.				Miscellaneous, or Interest on Arrears of Revenue and Refunds of Charges.		GRAND TOTAL.			
		1860-61. 16.	1861-62. 17.	1860-61. 18.	1861-62. 19.	1860-61. 20.	1861-62. 21.	Increase. 22.	Decrease. 23.	1860-61. 24.	1861-62. 25.	1860-61. 26.	1861-62. 27.	Increase. 28.	Decrease. 29.
		Rs.	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*	*Rs.*
1	Ganjam	-	-	20,803	55,771	10,68,355	12,39,702	1,71,347	-	1,113	1,441	21,42,391	22,98,593	1,56,202	—
2	Vizagapatam	-	-	40,313	1,12,393	4,01,761	5,90,172	1,88,411	-	2,982	4,311	16,68,247	18,83,532	2,15,285	—
3	Godavery District	20,339	7,839	40,459	1,01,234	7,59,576	7,30,596	-	28,980	12,580	4,899	41,93,617	39,22,148	-	2,71,469
4	Kistna ditto	-	-	24,538	94,165	8,91,641	10,31,656	1,40,015	-	6,761	6,293	36,75,992	40,51,984	3,75,992	—
5	Nellore	-	-	24,194	1,21,360	9,71,836	11,43,954	1,72,118	-	7,249	3,648	28,04,710	31,14,974	3,10,264	—
6	Cuddapah	-	-	66,316	79,467	2,89,505	3,34,219	44,714	-	18,509	18,061	20,43,094	23,57,790	3,14,696	—
7	Bellary	-	-	50,175	2,07,627	4,99,316	6,92,494	1,93,178	-	714	3,123	24,65,971	29,38,162	4,72,191	—
8	Kurnool	-	-	7,825	97,348	2,38,291	3,18,085	79,794	-	28,132	6,352	16,17,921	18,21,572	2,03,651	—
9	Madras	-	-	7,138	51,334	22,56,910	27,89,121	5,32,211	-	1,291	7,573	36,09,993	41,03,061	4,93,068	—
10	North Arcot	-	-	23,515	69,421	3,04,033	4,17,067	1,13,034	-	316	1,000	22,77,614	25,56,398	2,78,784	—
11	South Arcot	69,758	74,843	18,238	44,146	7,72,731	9,12,769	1,40,038	-	11,651	3,355	32,61,226	35,24,681	2,63,455	—
12	Tanjore	83,507	57,404	60,320	90,106	18,52,167	20,13,832	1,61,665	-	12,289	6,337	66,27,650	64,42,905	-	1,84,745
13	Trichinopoly	-	-	15,121	25,728	96,173	1,70,918	74,745	-	81	114	16,20,505	17,06,142	85,637	—
14	Madura	235	323	37,902	1,30,050	6,54,733	10,92,429	4,37,696	-	2,946	5,251	26,64,291	31,03,906	4,39,615	—
15	Tinnevelly	48,768	72,134	31,607	84,571	8,03,894	9,96,504	1,92,610	-	17,226	22,808	33,96,362	38,57,086	4,60,724	—
16	Coimbatore	-	-	12,118	66,720	2,52,336	3,71,372	1,19,036	-	4,717	3,273	26,53,129	25,21,266	-	1,31,863
17	Salem	-	-	16,381	50,362	2,81,641	3,20,016	38,375	-	7,665	13,298	22,90,821	26,53,695	3,62,874	—
18	North Canara	64,506	58,147	4,915	26,460	4,67,204	5,72,695	1,05,491	-	15,923	9,793	15,79,253	14,75,970	-	1,03,283
19	South Canara	-	-	9,854	35,406	4,70,960	6,87,467	2,16,507	-	3,762	1,391	15,61,777	18,74,674	3,12,897	—
20	Malabar	306	794	28,742	1,47,620	11,38,152	15,27,662	3,89,510	-	1,162	664	28,73,109	32,86,055	4,12,946	—
	Sea Customs, Madras	-	-	2,440	2,502	15,98,981	13,44,244	-	2,54,737	-	-	15,98,981	13,44,244	-	2,54,737
	TOTAL - - *Rs.*	2,87,419	2,71,484	5,42,914	16,93,791	1,60,70,196	1,92,96,974	35,10,495	2,83,717	1,57,069	1,22,985	5,66,26,654	6,08,38,838	51,58,281	9,46,097
							Net - - - *Rs.*	32,26,778					Net - - - *Rs.*	42,12,184	

Deduct:

	Rs.	Rs.
Note.—Collections of income tax not entered for all districts in 1860-61, but now included - - -	5,42,914	
Extra revenue in salt, stamp penalties, and refund of charges omitted in the accounts of Godavery in 1860-61, but now brought to account - - - - - - - - - - - - - -	11,419	
		5,54,333
Remainder - - -		5,60,72,321

Add:

	Rs.
Difference in Tinnevelly between the accounts originally submitted by the Collector and those subsequently rendered by him -	3,690
Total as per Column 25 of similar Statement for 1860-61 - - -	5,60,76,011

APPENDIX No. V.

STATEMENTS showing the operation of INCOME TAX ACT No. XXXII. of 1860, and No XXI. of 1861, for the Year ending 30 April 1862.

1. Number of Special Notices issued.	2. Number of Schedules returned filled-up.	3. Number of Returns disposed of.	4. Number of Assessments made under Act XXXII. of 1860, and Act XXI. of 1861.		5. Amount Assessed.		6. Amount Collected and brought to Account.		7. Assessments by Composition.	
			1860–61.	1861–62.	1860–61.	1861–62.	1860–61.	1861–62.	Number of Cases.	Amount Assessed.
2,814	*7,901	7,901	6,558	11,704	1,11,118	2,81,901	2,01,684	98,310	1	1,554 - -

8. Total Number of Cases of Surcharges made under all the Heads.	9. Total Number of Cases of Surcharges disposed of.	10. Number of Appeals.	11. Number of Appeals Successful.	12. Number of Complaints against the Officers of the Department.	13. Number of Cases in which the Charge was Established.	14. Cost of the Establishment for the Year 1861–62.	15. Honorarium Fees paid in the Year 1861–62.	16. Office Rent.	17. Printing and Contingent Expenses for the Year 1861–62.	18. TOTAL COST.
4,766	4,503	2,088	448	1	- -	63,477	4,192	1,800	935	70,440

* Of this number, 6,558 were on account of 1860–61, and 1,343 on account of 1861–62.

(A.)—STATEMENT showing the RECEIPTS, DISBURSEMENTS, and BALANCES, connected with the Port Charges and Dues in the various Ports of the Presidency of *Fort St. George*, under the operation of Act XXII. of 1855, from 1st May 1861 to 30th April 1862, published in accordance with the 44th Section of the above Act.

NAMES of the PORTS.	Receipts.			Disbursements.			Excess for this Year.			Deficit for this Year.			Total Balance to Credit of the Port.			Total Deficit against the Port.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Munsoorcottah -	722	15	9	590	8	–	132	7	9	-		-	132	7	9	—		
Calingapatam -	964	8	6	491	12	–	472	12	6	-		-	472	12	6	—		
Bimlipatam - -	1,432	15	6	1,000	1	4	432	14	2	-		-	4,326	6	11	—		
Vizagapatam - -	1,532	4	6	1,534	13	8	-	-	-	2	9	2	-	-	-	2,094	3	1
Cocanada - -	8,511	9	–	6,415	7	3	2,096	1	9	-		-	4,471	–	11	—		
Masulipatam* -	546	–	1	325	14	11	220	1	2	-		-	220	1	2	—		
Madras - - -	41,779	10	4	31,128	11	2	10,650	15	2	-		-	67,742	6	–	—		
Cuddalore - -	828	2	9	171	14	8	656	4	1	-		-	1,461	5	4	—		
Tranquebar - -	593	15	5	88	–	–	505	15	5	-		-	2,973	11	1	—		
Negapatam - -	1,879	9	9	1,860	9	5	19	–	4	-		-	5,241	8	11	—		
Tuticorin - -	4,994	14	3	2,882	2	11	2,112	11	4	-		-	5,235	4	4	—		
Cochin - - -	9,545	3	8	4,385	2	6	5,160	1	2	-		-	5,660	9	9	—		
Calicut - - -	3,257	2	9	1,896	–	9	1,361	2	–	-		-	5,405	6	9	—		
Tellicherry - -	1,440	8	3	635	6	3	805	2	–	-		-	2,070	–	5	—		
Cannanore - -	1,900	–	3	256	8	5	1,643	7	10	-		-	7,011	10	2	—		
Mangalore - -	2,005	2	1	674	13	–	1,330	5	1	-		-	5,603	1	3	—		
TOTAL - - *Rs.*	81,934	10	10	54,337	14	3	27,599	5	9	2	9	2	1,18,027	13	3	2,094	3	1

* This account is only from December 1861 inclusive, as the Order of Government, Marine Department, No. 401, of 4th December 1861, sanctioned the debt of *Rs.* 6,538. 10. 7. being written off; the expenses of the Port Establishment being since then borne by Government, and those of the Light Establishment by the Port Fund.

(B.)—PARTICULARS of the Trade of the PORTS in each District for the Official Year, 1861-62.

NAMES of PORTS.	BRITISH.			FOREIGN.			COUNTRY or NATIVE.			TOTAL.			VALUE OF		DUTY ON		Sea Custom Revenue.
	Vessels.	Tonnage.	Dues.	Vessels.	Tonnage.	Dues.	Vessels.	Tonnage.	Dues.	Vessels.	Tonnage.	Dues.	Exports.	Imports.	Exports.	Imports.	
GANJAM:			Rs a. p.			Rs. a. p.			Rs. a. p.			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Ganjam	10	4,835	–	3	1,578	–	18	2,459¼	–	31	8,872¼	–	3,73,203 10 2	1,00,042 8 10	19,016 13 7	27 14 11	19,044 12 6
Munsoorcottah	8	5,293	330 13 –	5	2,078⅘	129 14 9	43	6,102	187 9 8	56	13,473⅘	648 5 5	10,56,927 5 9	7,37,384 8 2	13,145 15 1	258 4 4	13,404 3 5
Sonnapore	–	–	–	2	619	–	34	4,081	–	36	5,300	–	1,10,168 10 11	1,27,467 – 4	2,300 10 4	–	2,300 10 4
Barwah	–	–	–	–	–	–	34	4,618	–	34	4,618	–	2,82,248 14 8	14,515 11 6	—	—	—
Poondy	1	437	–	3	1,600	–	41	5,128	–	45	7,165	–	1,78,490 – 10	1,16,290 9 7	3,168 4 4	3,548 4 11	6,716 9 3
Calingapatam	5	1,734	106 10 –	16	7,662½	478 14 6	52	8,340½	183 8 3	73	17,737	769 – –	5,99,453 15 4	1,07,117 5 11	17,377 8 –	1,032 7 8	18,409 15 8
Bavanapadu	–	–	–	–	–	–	17	2,914	–	17	2,914	–	1,39,809 1 10	66,361 11 5	—	—	—
TOTAL	24	12,299	437 7 –	29	13,538$\frac{3}{10}$	608 13 3	239	34,242¾	371 1 11	292	60,080	1,417 6 2	27,40,301 11 6	12,69,179 7 9	55,009 3 4	4,866 15 10	59,876 3 2
VIZAGAPATAM:																	
Vizagapatam	52	19,329	461 9 3	4	1,873	117 1 –	108	13,178$\frac{76}{130}$	705 4 –	164	34,380$\frac{76}{130}$	1,283 14 3	5,05,346 – –	3,49,680 – –	2,472 – 3	60 – –	2,532 – 3
Conadah	–	–	–	–	–	–	1	24	–	1	24	–	– – –	972 – –	—	—	—
Poodemadka	–	–	–	2	706	–	8	1,070	–	10	1,776	–	49,949 – –	762 – –	708 5 3	–	708 5 3
Bimlipatam	56	22,045¾	632 15 3	19	10,585¼	629 14 6	39	4,222	184 4 3	114	36,853	1,447 2 9	15,67,080 – –	6,36,554 – –	22,426 2 3	3,425 14 –	25,852 – 3
Pentakottah	–	–	–	5	2,457	–	10	856	–	15	3,313	–	1,86,163 – –	6,498 – –	4,999 10 6	–	4,999 10 6
TOTAL	108	41,374¾	1,094 8 6	30	15,621¼	746 15 6	166	19,350$\frac{76}{130}$	889 8 3	304	76,346$\frac{76}{130}$	2,731 – 3	23,08,538 – –	9,94,466 – –	30,606 2 3	3,485 14 –	34,092 – 3
GODAVERY DISTRICT:																	
Coringa	4	894	–	–	–	–	199	25,068	2,823 3 –	203	25,962	2,823 3 –	10,43,018 – –	2,85,811 – –	25,947 7 8	1,035 13 9	26,983 5 5
Cocanada	99	38,609	2,757 1 7	55	24,839	2,990 3 4	–	–	–	154	63,448	5,747 4 11	19,27,296 – –	2,90,105 – –	40,329 9 6	7,523 5 9	47,852 15 3
Nursapore	–	–	–	–	–	–	83	3,459	–	83	3,459	–	1,58,918 – –	1,31,657 – –	1,021 10 5	–	1,021 10 5
TOTAL	103	39,503	2,757 1 7	55	24,839	2,990 3 4	282	28,527	2,823 3 –	440	92,869	8,570 7 11	31,29,232 – –	7,07,573 – –	67,298 11 7	8,559 3 6	75,857 15 1
KISTNA DISTRICT:																	
Nizampatam	–	–	–	–	–	–	242	14,134½	–	242	14,134½	–	2,71,926 3 4	56,168 13 5	328 1 1	–	328 1 1
Kottapallam	–	–	–	–	–	–	219	19,010½	–	219	19,010½	–	41,989 12 3	39,187 3 10	—	—	—
Masulipatam	43	15,173	558 1 11	14	5,134	319 15 2	247	12,161	568 6 11	304	32,168	1,446 8 –	11,28,283 1 –	8,03,238 3 6	10,815 15 6	581 8 11	11,397 8 5
Epurpallam	–	–	–	–	–	–	90	10,440$\frac{56}{100}$	–	90	10,440$\frac{56}{100}$	–	3,30,445 8 8	5,68,743 15 7	—	—	—
Motupalli	–	–	–	–	–	–	32	1,709	–	32	1,709	–	25,978 12 4	27,779 9 6	—	—	—
TOTAL	43	15,173	558 1 11	14	5,134	319 15 2	830	57,455$\frac{56}{100}$	568 6 11	887	77,752$\frac{56}{100}$	1,446 8 –	17,98,623 5 7	14,95,117 13 10	11,144 – 7	581 8 11	11,725 9 6
NELLORE:																	
Kottapatnum	–	–	–	–	–	–	286	31,047½	346 2 –	286	31,047½	346 2 –	3,55,844 4 11	3,25,236 14 4	308 13 3	37 4 9	346 2 –
Itamukala	–	–	–	–	–	–	102	14,187½	–	102	14,187½	–	2,34,115 2 9	1,55,201 4 5	—	—	—
Iskapalli	87	7,973	–	–	–	–	18	686	–	105	8,659	–	70,977 10 9	40,150 2 8	—	—	—
Kristnapatam	2	194	–	–	–	–	102	5,355¼	–	104	5,549¼	–	51,051 3 3	35,778 4 4	—	—	—
TOTAL	89	8,167	–	–	–	–	508	51,276¼	346 2 –	597	59,413¼	346 2 –	7,11,988 5 8	5,56,366 9 9	308 13 3	37 4 9	346 2 –
SOUTH ARCOT:																	
Cuddalore	22	5,797¼	249 6 3	–	–	–	159	911½	243 4 5	181	15,309¼	592 10 8	6,15,568 – –	3,42,984 – –	11,576 13 3	7,746 9 7	19,323 6 10
Porto Novo	80	9,571½	–	6	932	–	362	16,268¾	–	448	26,772½	–	2,89,693 – –	74,538 – –	18,230 – –	7,459 – –	25,689 – –
TOTAL	102	15,368¾	249 6 3	6	932	–	521	17,180¼	243 4 5	629	42,081¾	592 10 8	9,05,261 – –	4,17,522 – –	29,806 13 3	15,205 9 7	45,012 6 10

Tanjore:																	
Nagore	227	13,262	- -	4	40	- -	–	–	- -	231	13,302	- -	33,456 - -	2,71,596 - -	1,964 15 8	27,147 1 11	29,112 1 7
Negapatam	434	42,964	1,827 9 9	3	831	51 15 –	–	–	- -	437	43,795	1,879 6 9	13,41,674 - -	11,05,488 - -	64,495 5 2	1,01,457 4 8	1,65,952 9 10
Topetorry	778	19,697	- -	–	–	-	–	–	- -	778	19,697	- -	53,049 - -	5,148 - -	5,768 - 1	516 1 2	6,284 1 3
Mootoopettah	904	36,642	- -	–	–	- -	–	–	- -	901	36,642	- -	9,25.901 - -	47,060 - -	59,662 15 4	4,704 12 5	64,367 11 9
Teroomulvassel	485	31,808	- -	8	32	- -	–	–	- -	493	31,840	- -	3,31,165 - -	34,563 - -	28,809 11 11	3,383 - 5	32,192 12 4
Tranquebar	12	2,983	186 7 –	8	3,286	197 3 6	87	6,815	210 4 11	107	13,084	593 15 5	2,98,304 - -	11,714 - -	13,246 15 6	1,205 2 8	14,452 2 2
Total	2,840	1,47,356	2,014 – 9	23	4,189	249 2 6	87	6,815	210 4 11	2,950	1,58,360	2,473 6 2	29,83,549 - -	14,75,569 - -	1,73,947 15 8	1,38,413 7 3	3,12,361 6 11
Madura:																	
Keelakarry	–	–	- -	–	–	- -	397	27,308½	- -	397	27,308½	- -	3,45,587 - -	1,50,892 - -	8,397 5 11	13,114 6 2	21,511 12 1
Davepatam	–	–	- -	9	143½	- -	861	12,139¾	- -	870	12,283¼	- -	62,957 - -	41,703 - -	2,053 1 11	2,623 3 5	4,676 5 4
Paumben	–	–	- -	–	–	- -	1,984	79,871	- -	1,984	79,871	- -	1,39,193 - -	1,97,809 - -	469 1 5	2,242 11 9	2,711 13 2
Tondy	–	–	- -	–	–	- -	507	14,310¾	- -	507	14,310¾	- -	1,43,985 - -	16,293 - -	7,926 10 5	1,629 5 6	9,555 15 11
Total	–	–	- -	9	143½	- -	3,749	1,33,630	- -	3,758	1,33,773½	- -	6,91,722 - -	4,06,697 - -	18,846 3 8	19,609 10 10	38,455 14 6
Tinnevelly:																	
Vypaur	–	–	—	–	–	—	–	–	—	–	–	—	—	—	—	—	—
Tuticorin	310	39,313¼	4,579 14 –	1	877	164 7 –	652	7,771½	249 13 3	963	47,961¾	4,994 2 3	54,42,237 - -	6,09,483 - -	6,667 1 1	31,115 6 5	37,782 7 6
Coilpatam	–	–	—	–	–	—	–	–	—	–	–	—	—	—	—	—	—
Coolasagarapatam	–	–	—	–	–	—	–	–	—	–	–	—	—	—	—	—	—
Total	310	39,313¼	4,579 14 –	1	877	164 7 –	652	7,771½	249 13 3	963	47,961¾	4,994 2 3	54,42,237 - -	6,09,483 - -	6,667 1 1	31,115 6 5	37,782 7 6
Malabar:																	
Cannanore	51	23,298	1,022 13 –	6	3,797	237 5 –	1,369	30,964	618 12 3	1,426	58,059	1,878 14 3	19,36,816 - -	26,37,253 - -	3,142 7 2	2,844 12 10	5,987 4 –
Tellicherry	25	10,432	637 5 9	14	5,873	342 10 6	1,372	24,371	418 8 –	1,411	40,676	1,398 8 3	24,02,307 - -	25,78,339 - -	8,476 6 9	1,121 3 4	9,597 10 1
Callay	2	132	- -	–	–	- -	423	7,126	- -	425	7,258	- -	61,949 - -	2,18,158 - -	232 6 3	11 13 4	244 3 7
Baragaree	7	1,240	- -	–	–	- -	769	16,696	- -	776	17,936	- -	13,24,592 - -	5,13,522 - -	132 13 11	114 12 9	247 10 8
Quilandy	14	5,815	- -	–	–	- -	364	5,657	- -	378	11,508	- -	1,61,012 - -	2,36,313 - -	302 11 5	131 2 1	433 13 6
Calicut	65	21,748	1,003 7 10	–	–	- -	2,200	79,111	2,000 13 9	2,265	1,00,859	3,004 5 7	29,38,603 - -	37,55,620 - -	11,123 1 –	8,594 3 2	19,717 4 2
Tanore	–	–	- -	–	–	- -	309	8,746	- -	309	8,746	- -	3,26,010 - -	34,293 - -	105 3 6	128 3 1	233 6 7
Ponany	1	84	- -	–	–	- -	692	22,523	- -	693	22,607	- -	11,30,762 - -	2,55,491 - -	245 7 4	3 2 –	248 9 4
Choughat	1	72	- -	–	–	- -	100	5,668	- -	101	5,740	- -	1,21,810 - -	45,983 - -	—	—	—
Cochin	179	40,448	3,625 6 3	20	12,114	1,452 9 –	1,685	50,427	2,162 15 9	1,884	1,02,989	7,240 15 –	59,74,876 - -	42,84,192 - -	56,202 5 3	13,110 5 5	69,312 10 8
Total	435	1,03,305	6,289 – 10	40	21,784	2,032 8 6	9,283	2,51,289	5,201 1 9	9,668	3,76,378	13,522 11 1	1,63,81,737 - -	1,45,59,164 - -	79,962 14 7	26,059 10 –	1,06,022 8 7
South Canara:																	
Mangalore	36	12,357¼	540 9 3	283	28,205	957 9 3	1,797	32,647¾	481 15 7	2,116	73,210	1,980 2 1	35,60,704 - -	10,45,130 - -	24,257 11 6	6,222 12 11	30,480 8 5
Bekul	–	–	- -	–	–	- -	593	8,504½	- -	593	8,504½	- -	1,69,699 - -	42,694 - -	823 1 4	- - -	823 1 4
Oodipy	–	–	- -	7	385	- -	370	5,678¾	- -	377	6,063¾	- -	2,45,858 - -	1,30,151 - -	556 11 11	- - -	556 11 11
Barcoor	–	–	- -	60	2,589	- -	582	10,559	- -	642	13,148	- -	6,29,002 - -	87,126 - -	4,801 15 6	85 4 5	4,887 3 11
Total	36	12,357¼	540 9 3	350	31,179	957 9 3	3,342	57,390	481 15 7	3,728	1,00,926¼	1,980 2 1	46,05,263 - -	13,05,101 - -	30,439 8 3	6,308 1 4	36,747 9 7
Madras:																	
Madras	271	1,93,285	27,158 - -	62	34,941	6,044 - -	937	93,238	6,747 - -	1,270	3,21,464	39,949 - -	1,22,22,574 - -	1,96,53,821 - -	1,88,970 - -	10,98,365 - -	12,87,335 - -

(C.)—STATEMENT showing the WRECKS which have occurred at various Ports under this Presidency, during the Year 1861–62.

Name of Ship.	Tons.	Nation.	Date of Wreck.	At what Port.	REMARKS.
Albion - - -	349	British -	4 May 1861 -	Near Narsapore -	This ship was on her voyage from Madras to one of the po in the Ganjam Districts. Between 2 and 3 A.M. on the mor ing of the 4th May she ran ashore near Narsapore, and b came a total wreck. Crew and stores all saved. By ev dence given in the course of an investigation held by th Assistant Collector and the Master Attendant, it was clear shown that the captain of the vessel had grossly neglected h duties. The report of the Committee and the depositions we sent home to the Board of Trade.
Stree-Vencataswerloo -	285	Native -	2 June „ -	Cochin - - -	This vessel had arrived at Cochin from Bombay. On th morning of the 2d June 1861, she dragged her anchors an went ashore on the southern side of the channel, and became total wreck. All hands, except one, saved.
Hersilia - - -	623	British -	16 „ „ -	Near Poundy - -	This vessel being on her voyage from London to Calcutt was wrecked near Poondy at about 1 A.M., on the morning the 16th June 1861, and broke up within two hours and half afterwards. Chief officer and one seaman drowned. Th loss of the ship attributable to negligence in not having attende to the lead. The report of the Committee ordered to invest gate was sent home to the Board of Trade.
Queen of the Wave -	454	- ditto -	4 July „ -	Ganjam - - -	Had parted from her anchor in Ganjam Roadstead on th morning of the 4th July 1861, and stood to sea. On the 5t a fresh anchor having been got ready she stood in again an anchored; but shortly afterwards parted again and drove o shore, when she soon became a total wreck. Officers and cre all saved.
Alert - - -	281	- ditto -	7 Oct. „ -	Near Cuddalore -	She was on her voyage from Penang to Tranquebar and ha stood in towards the land near Cuddalore until she shoaled he water to three-and-three quarters fathoms, when in endeavou ing to put her about, she missed stays and immediately afte took the ground, and in a few days broke up entirely. Officer and crew all saved. Loss of the vessel attributed to gross care lessness, if not wilfulness, on the part of the commander. De positions, &c., sent home to the Board of Trade.
Golconda - - -	690	French -	8 Feb. 1862 -	13 miles south of Hope Island Lighthouse.	Was on her voyage from Bimlipatam to Masulipatam, an keeping in along the land with the wind from the south-east, t make the latter port, was set in by a current and was wrecke 13 miles south of the Hope Island Lighthouse, near the villag of Kauthapaulem at 1.30. A.M. on the 8th February 1862 Officers and crew, as also portion of the cargo, saved.

(D.)—STATEMENT of GOVERNMENT FREIGHT and PASSAGE MONEY, paid through the Office of the Superintendent of Marine to the Owners of the Madras, Northern Ports, and Rangoon Contract Mail Steamers, from January 1861 to March 1862.

Number of the Voyage.	Names of the Steamers.	Dates of Departure.	Dates of Arrival.	Passage Money out.	Freight Out.	Passage Money Home.	Freight Home.	Total Amount of Passage.	Total Amount of Freight.	GRAND TOTAL.
		1861:	1861:	Rs. a. p.	R. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1st	Governor Higginson.	11 Jan. -	7 Feb. -	7,084 12 –	414 1 6	9,674 5 4	274 15 10	16,759 1 4	689 1 4	17,448 2 8
2d	- ditto - -	12 Feb. -	5 Mar.	3,918 5 4	6 4 –	9,243 – –	- -	13,161 5 4	6 4 –	13,167 9 4
3d	- ditto - -	12 Mar.	7 April	2,167 12 –	175 9 10	10,291 4 –	445 10 11	12,459 – –	621 4 9	13,080 4 9
4th	- ditto - -	12 April	7 May -	2,720 4 –	354 14 10	7,965 13 4	- -	10,686 1 4	354 14 10	11,041 – 2
5th	- ditto - -	13 May -	16 June	1,481 12 –	40 – 3	9,938 10 8	- -	11,420 6 8	40 – 3	11,460 6 11
6th	- ditto - -	27 June -	3 Aug. -	2,790 4 10	398 15 1	3,510 12 –	5 2 9	6,301 – 10	404 1 10	6,705 2 8
7th	- ditto - -	15 Aug. -	- -	1,333 13 4	208 2 8	- -	- -	1,333 13 4	208 2 8	8,578 14 8
	Coringa -	- -	12 Sept.	- -	- -	7,036 14 8	- -	7,036 14 8	- -	
8th	- ditto - -	21 Sept.	13 Oct. -	435 5 4	40 4 10	9,114 1 4	- -	9,549 6 8	40 14 10	9,590 5 6
9th	- ditto - -	18 Oct. -	11 Nov. -	760 10 8	76 5 11	7,408 12 –	- -	8,169 6 8	76 5 11	8,245 12 7
10th	- ditto - -	15 Nov. -	5 Dec. -	3,156 13 4	70 4 4	7,967 13 4	- -	11,124 10 8	70 4 4	11,194 15 –
11th	- ditto - -	11 Dec. -	31 Dec. -	1,112 9 4	133 12 5	8,284 10 8	- -	9,397 4 –	133 12 5	9,531 – 5
		1862:	1862:							
12th	- ditto - -	11 Jan. -	- -	7,097 1 4	430 11 7	- -	- -	7,097 1 4	430 11 7	10,696 11 4
	Rangoon -	- -	1 Feb. -	- -	- -	3,130 8 –	38 6 5	3,130 8 –	38 6 5	
13th	- ditto - -	11 Feb. -	5 Mar. -	6,939 13 4	172 – 7	7,675 6 8	– 10 1	14,615 4 –	172 10 8	14,787 14 8

REMARKS.—In addition to the above payments, a subsidy of 4,500 rupees a trip, out and home, was granted, and occasionally a few commissariat stores were shipped, freight for which was disbursed by the Commissary General.

(E.)—STATEMENT of TROOPS arrived from *England*, during the Year 1861-62.

NAME OF VESSEL.	Date of Arrival.	Rate.	Number of Officers.	Number of Men.	Number of Women.	Number of Children.
	1861:	£. s. d.				
Ship "Clarence" - - - - - -	28 September -	8 6 –	11	261	24	21
Steamer "Hydaspes" - - - - -	25 October -	7 19 5	5	321	16	12
		TOTAL - - -	16	582	40	33

STATEMENT of TROOPS, INVALIDS, &c., embarked for *England* during the Year 1861-62.

NAME OF VESSEL.	Date of Sailing.	Rate for Invalids.	Rate for Effectives.	Number of Officers.	Number of Men.	Number of Women.	Number of Children.	Insanes. Number.	Insanes. Rate.	Convicts. Number.	Convicts. Rate.
	1861:	*Rs.*	*Rs.*						*Rs.*		*Rs.*
Ship "General Caulfield" -	26 May - -	300	300	3	112	5	5	–	–	2	600
Ship "Earl of Hardwicke" -	2 August -	–	230	4	170	19	20	–	–	1	460
Ship "Isabella" - - -	6 November -	218	218	2	91	5	13	–	–	1	450
Ship "Nile" - - - -	21 December -	250	–	–	1	–	–	–	–	–	–
Steamer "Hydaspes" - -	21 " -	230	230	1	29	2	1	–	–	–	–
	1862:										
Ship "Renown" - - -	15 January -	250	–	1	1	–	–	–	–	–	–
Ship "Barham" - - -	26 February -	240	–	3	121	11	25	6	700	–	–
Steamer "Queen of the South"	7 March -	237	222 450	*3	93	13	62	–	–	–	–
Ship "Trafalgar" - - -	15 " -	$236\frac{3}{8}$	$221\frac{3}{8}$	3	116	11	18	13	700	3	400
		TOTAL - - -		20	734	66	143	19	–	7	

* One 3d class schoolmaster.

(F.)—STATEMENT showing the RECEIPTS and DISBURSEMENTS of COALS at *Madras* and the Out-Ports during the Official Year 1861-62.

MADRAS:	*Tons*	*cwt.*	*qrs.*	*lbs.*
Balance on hand, 30th April 1861	5,840	13	3	13
Receipts - - - - - -	5,923	5	1	21
	11,763	19	1	6
Expenditure - - - - -	4,231	10	–	–
Balance on hand, 30th April 1862	7,532	9	1	6

COCANADA:				
Balance on hand, 30th April 1861	80	14	2	4
Receipts - - - - - -	588	10	2	–
	669	5	–	4
Expenditure - - - - -	289	–	–	–
Balance on hand, 30th April 1862	380	5	–	4

BIMLIPATAM:	*Tons*	*cwt.*	*qrs.*	*lbs.*
Balance on hand, 30th April 1861	30	19	–	–
Expenditure - - - - -	21	–	–	–
Balance on hand, 30th April 1862	9	19	–	–

MUNSOORCOTTAH:				
Balance on hand, 30th April 1861	126	–	–	–
No expenditure - - - -	—			
Balance on hand, 30th April 1862	126	–	–	–

COCHIN:				
Balance on hand, 30th April 1861	266	14	2	–
Receipts - - - - - -	233	15	1	17
	500	9	3	17
Expenditure - - - - -	40	–	–	–
Balance on hand, 30th April 1862	460	9	3	17

Chap. IX.
Madras.

(G.) Paumben Pilotage.

The following Pilotage is now levied on Vessels passing through the Paumben Channel:—

	Rs.	a.	
On vessels drawing 3 feet and under -	-	9	per foot.
Ditto - ditto 4 feet and over 3 feet -	-	10	„
Ditto - ditto 5 - ditto - 4 „ -	-	11	„
Ditto - ditto 6 - ditto - 5 „ -	-	13	„
Ditto - ditto 7 - ditto - 6 „ -	-	15	„
Ditto - ditto 8 - ditto - 7 „ -	1	4	„
Ditto - ditto 9 - ditto - 8 „ -	1	9	„
Ditto - ditto 10 - ditto - 9 „ -	1	14	„
Ditto - ditto 11 - ditto - 10 „ -	2	8	„
Ditto - ditto 12 - ditto - 11 „ -	3	2	„
Ditto - ditto 13 - ditto - 12 „ -	3	12	„

2. The draught is calculated in even feet: a vessel of 3½ feet being charged as 4 feet, or *Rs.* 2. 8.; and one of less than 3½ feet at 3 feet, or *Rs.* 1. 11.

3. The proportion to be assigned to the licensed pilots is one-fifth of the pilotage levied.

(H.)—Statement of Vessels passing through the Paumben Channel, from 1849 to 1861 inclusive.

Calendar Year.	Square-rigged Vessels.	Tonnage.	Dhonies.	Tonnage.	Total Vessels.	Total Tonnage.	Average Size.	
							Vessels.	Dhonies.
							Tons.	*Tons.*
1849 - -	1,003	79,234	1,114	58,700	2,117	1,37,934	79	53
1850 - -	1,142	90,656	1,004	60,807	2,146	1,51,457	79⅓	60½
1851 - -	1,092	82,697	939	57,084	2,031	1,39,781	75¾	60¾
1852 - -	1,178	94,109	924	59,565	2,112	1,53,674	80	64½
1853 - -	1,192	98,189	920	54,264	2,122	1,52,453	82⅓	59
1854 - -	1,035	78,746	879	59,140	1,914	1,39,886	76	67½
1855 - -	1,220	1,09,326	947	60,771	2,169	1,70,097	89½	64⅛
1856 - -	1,353	1,21,810	990	54,867	2,343	1,76,677	90	55½
1857 - -	1,506	1,38,090	1,025	57,214	2,531	1,95,304	91¾	55¾
1858 - -	1,108	1,13,814	803	43,720	1,911	1,57,534	102¾	54½
1859 - -	974	88,574	742	38,414	1,716	1,26,988	91	51¾
1860 - -	1,366	1,43,082	950	48,763	2,316	1,91,845	104¾	51⅓
1861 - -	1,335	1,33,897	905	45,916	2,240	1,79,813	100¼	50⅔

(I.)—Statement of Pilotage levied at Paumben, from 1849 to 1861 inclusive.

CALENDAR YEAR.	Pilotage Levied.			Pilots' Share.			Credited to Government.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1849 - - - - -	7,247	2	–	1,811	12	6	5,435	5	6
1850 - - - - -	4,684	8	–	1,171	2	–	3,513	6	–
1851 - - - - -	10,525	5	–	2,628	8	6	7,896	12	6
1852 - - - - -	11,456	12	3	2,861	14	9	8,594	13	6
1853 - - - - -	11,569	5	9	2,890	1	–	8,679	4	9
1854 - - - - -	11,153	1	9	2,786	7	5	8,366	10	4
1855 - - - - -	12,486	8	3	3,120	9	8	9,365	14	7
1856 - - - - -	13,168	5	–	3,292	1	3	9,876	3	9
1857 - - - - -	15,575	5	6	3,891	13	9	11,683	7	9
1858 - - - - -	12,820	8	–	3,203	2	–	9,617	6	–
1859 - - - - -	10,647	1	–	2,661	–	8	7,986	–	9
1860 - - - - -	17,144	5	–	4,286	1	3	12,858	3	9
1861 - - - - -	16,193	9	–	4,048	6	3	12,145	2	9

(J.)—STATEMENT of VESSELS built at *Cochin*, with their Estimated Value, from 1 May 1861 to 30 April 1862.

Year.	NAMES OF VESSELS.	Tonnage of Square-Rigged Vessels.	RATE OF BUILDING.	Estimated Value.	Tonnage of Pattimars and other Coasting Crafts.	RATE OF BUILDING.	Estimated Value.	WOOD.	REMARKS.
				Rs.			*Rs.*		
1861-62 -	Brig Amanathool Careem.	84	At 143 rupees per ton	12,012	- -	- - - -	- -	Anjelly and Benteak	Measured under Merchant Ship Act 1854.
	Gunja Calleanprasad.	- -	- - - -	- -	102	At 30 rupees per ton	3,060	Benteak - - -	Act X. of 1841.
	Pattimary Mahmody	- -	- - - -	- -	57	,, 53 - ditto - -	3,021	Anjelly and Benteak	- ditto.
	Sambook Saad -	- -	- - - -	- -	27	,, 22 - ditto - -	594	- ditto - diito -	- ditto, Arab colors.
	Manjee Nasoorlamid	- -	- - - -	- -	30	,, 20 - ditto - -	600	Anjelly - - -	- ditto.
	Pattimary Guenapath Sovay.	- -	- - - -	- -	54	,, 65 - ditto - -	3,510	ditto, Teak and Benteak	- ditto.
	Padarva Salamata -	- -	- - - -	- -	47	,, 28 - ditto - -	1,316	Anjelly - - -	- ditto.
	Ditto, Sakeenatee	- -	- - - -	- -	47	,, 28 - ditto - -	1,316	- ditto - - -	- ditto.
	Guuja Judel Wahab	- -	- - - -	- -	113	,, 27 - ditto - -	3,051	Benteak - - -	- ditto, Arab colors.
	Munjee Slamaty -	- -	- - - -	- -	14	,, 22 - ditto - -	308	Anjelly and Benteak	- ditto.
	Ditto, Slamaty -	- -	- - - -	- -	17	,, 71 - ditto - -	1,207	- ditto - - ditto -	- ditto.
	Buggalow Fadel Careem.	- -	- - - -	- -	219	,, 28 - ditto - -	6,132	Teak and Benteak -	- ditto, Arab colors.
	Brig Amanathool Raymon.	97	At 150 rupees per ton	14,550	- -	- - - -	- -	- ditto, Benteak and Anjelly.	- ditto.
	Ditto Pookeesah Cotta Calli Letchmy	79	,, 200 - ditto -	15,800	- -	- - - -	- -	- ditto - ditto -	- ditto.
	TOTAL - - -	260	- - - -	42,362	727	- - - -	24,115		

STATEMENT exhibiting the difference between the official Years 1860-61 and 1861-62.

Years.	Total New Tonnage of Square-rigged Vessels.	Difference in Decrease.	Value of the New Tonnage.	Difference in Decrease.	Total New Tonnage of Coasting Crafts.	Difference in Decrease.	Value of the New Tonnage.	Difference in Decrease.
			Rs. a. p.	*Rs. a. p.*			*Rs. a. p.*	*Rs. a. p.*
1860-61 -	1,566	- - -	2,36,008 13 10	- - -	919	- - -	53,278 - -	—
1861-62 -	260	- - -	42,362 - -	- - -	727	- - -	24,115 - -	—
		1,306	- - -	1,93,646 13 10	- - -	192	- - -	29,163 - -

(K.)—STATEMENT of VESSELS built at *Malabar*, *Travancore*, &c., but registered at *Cochin*, from 1 May 1861 to 30 April 1862.

Year.	NAMES OF VESSELS.	Tonnage of Square-Rigged Vessels.	RATE OF BUILDING.	Estimated Value.	Tonnage of Pattimars and other Coasting Crafts.	RATE OF BUILDING.	Estimated Value.	WOOD.	REMARKS.
				Rs.			*Rs.*		
1861-62 -	Dhoney Soondera Lutchmy.	- -	- - - -	- -	64	At 15½ rupees per ton	993	Bente - -	Measured under Act 10 of 1841, built at Alleppee.
	Brig Rosparell -	145	At 70 rupees per ton	10,150	- -	- - - -	- -	- ditto, and Anjelly	Act 10 of 1841, built at Quilon.
	Schooner Mahomed Mooydin Cauder Hyderhoos.	29	,, 104 ,, ,, -	3,016	- -	- - - -	- -	Anjelly - - -	- ditto, Colasherryputnum.
	Dhoney Sithulbee Sumdauee.	- -	- - - -	- -	36	At 15 rupees per ton	540	- ditto - - -	- ditto - ditto.
	Schooner Maria Raphael.	42	At 190 rupees per ton	7,980	- -	- - - -	- -	- ditto, and Jackwood.	- ditto, Tuticorin.
	TOTAL - - -	216	- - - -	21,146	100	- - - -	1,533		

STATEMENT exhibiting the difference between the official Years 1860-61 and 1861-62.

Year.	Total New Tonnage of Square-rigged Vessels.	Difference in Increase.	Value of the New Tonnage.	Difference in Increase.	Total New Tonnage of Coasting Crafts.	Difference in Decrease.	Value of the New Tonnage.	Difference in Decrease.
			Rs.	*Rs.*			*Rs.*	
1860-61 - - - -	- - -	- - -	- - -	- - -	266	- - -	12,838	—
1861-62 - - - -	216	- - -	21,146	- - -	100	- - -	1,533	—
		216	- - -	21,146	- - -	166	- - -	11,305

(L.)—STATEMENT showing the PILOTAGE, TONNAGE and FEES levied at *Cochin*, from November 1860 to April 1862.

Month and Year.	Inward Tonnage and Fees.		Outward Tonnage and Fees.		Total Monthly Tonnage and Fees.		Three-fifths Pilot's Share.	Two-fifths Government Share.
1860:	*Tons.*	*Rs.*	*Tons.*	*Rs.*	*Tons.*	*Rs.*	*Rs.*	*Rs.*
November -	2,587	255	1,878	185	4,465	440	264	176
December -	1,413	155	2,594	245	4,007	400	240	160
1861:								
January -	1,884	170	1,779	195	3,663	365	219	146
February -	3,848	370	2,196	205	6,044	575	345	230
March -	1,612	130	3,362	290	4,974	420	252	168
April - -	3,321	305	4,601	395	7,922	700	420	280
May - -	820	70	835	70	1,655	140	84	56
June - -	500	40	500	40	1,000	80	48	32
July - -	295	30	–	–	295	30	18	12
August -	–	–	295	30	295	30	18	12
September -	1,336	135	937	80	2,273	215	129	86
October -	1,122	90	1,446	155	2,568	245	147	98
November -	1,199	120	1,980	195	3,179	315	189	126
December -	1,241	115	937	85	2,178	200	120	80
1862:								
January -	1,669	130	304	30	1,973	160	96	64
February -	1,732	175	2,706	245	4,438	420	252	168
March -	2,119	190	2,084	180	4,203	370	222	148
April - -	2,328	200	2,151	205	4,479	405	243	162
TOTAL - -	29,026	2,680	30,585	2,830	59,611	5,510	3,306	2,204

APPENDIX, No. VII.

FINANCE STATEMENT for the Madras Presidency.

	Actual of 1858-59.			Actual of 1859-60.			Actual of 1860-61.		
REVENUE.									
ORDINARY.	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Land Revenue—Current and Arrears	4,16,93,548	4	8	4,08,45,319	8	7	3,93,53,927	10	5
Salt	60,19,344	9	6	64,71,146	1	8	70,67,893	–	–
Tribute	34,46,430	8	5	34,46,430	8	5	34,46,430	8	5
Abkarry	28,44,135	8	4	29,26,473	10	–	30,71,252	13	10
Land and Sea Customs	15,28,640	4	3	25,37,385	10	2	28,88,665	9	11
Moturpha	10,78,371	–	2	10,63,160	6	2	9,93,720	15	–
Stamps	7,22,334	13	6	8,49,258	6	–	14,50,859	11	7
Income Tax	-	-	-	-	-	-	10,14,274	2	10
Postal Collections	8,63,872	–	1	9,31,485	15	5	8,91,615	15	9
Miscellaneous	13,30,757	2	3	14,34,846	15	7	19,06,889	6	–
TOTAL, Ordinary	5,95,27,434	3	2	6,05,05,507	2	–	6,20,85,529	13	9
EXTRAORDINARY.									
Miscellaneous	24,16,701	2	–	38,98,686	4	6	30,86,779	10	10
PROFIT AND LOSS.									
Miscellaneous	5,14,248	3	3	9,38,476	6	6	10,58,358	8	4
GRAND TOTAL *Rs.*	6,24,58,383	8	5	6,53,42,669	13	–	6,62,30,668	–	11
EXPENDITURE.									
ORDINARY.									
Political Disbursements, chargeable on the Revenues	43,08,600	5	11	44,41,413	13	1	50,56,731	10	9
General Department	58,71,827	11	2	64,87,622	4	11	77,34,857	5	7
Public Instruction	5,37,831	7	6	5,23,254	11	6	4,95,588	–	2
TOTAL, General	1,07,18,259	8	7	1,14,52,290	13	6	1,32,87,177	–	6
Judicial Department	45,87,224	15	4	47,27,387	6	1	56,75,092	10	7
Revenue Department	46,46,561	–	2	46,30,878	–	1	54,92,332	8	3
Land and Sea Customs	2,20,126	15	6	2,08,781	3	7	1,78,976	2	1
Salt	9,66,454	4	–	9,01,166	7	2	18,34,108	15	2
TOTAL, Revenual	58,33,142	3	8	57,40,823	10	10	75,05,417	9	6
ORDINARY.									
Marine	3,31,737	6	7	1,93,659	5	–	6,83,474	–	7
Military	4,62,80,808	9	5	4,93,87,909	4	10	3,70,66,509	–	2
	6,77,51,172	11	7	7,15,02,072	8	3	6,42,17,670	5	4
Repairs of Roads, Bridges, &c.	9,03,685	13	3	12,65,054	15	3	12,60,613	2	3
Ditto of Buildings	2,82,866	15	–	2,69,539	15	1	2,52,269	14	8
Ditto of Revenual Irrigation Canals, &c.	19,14,577	10	5	17,11,045	–	4	11,56,829	4	10
Local Funds	10,758	11	7	20,478	5	3	2,99,509	11	4
Salaries, Establishment, and Contingencies	16,75,574	13	3	16,57,859	2	7	16,48,017	3	10
Railway and Irrigation and Canal Companies (Supervision charges)	38,995	11	3	48,466	10	8	63,069	13	11
TOTAL, Public Works	48,26,459	10	9	49,72,444	1	2	46,80,309	2	10
TOTAL, Ordinary } carried forward	7,25,77,632	6	4	7,64,74,516	9	5	6,88,97,979	8	2

Chap. IX.
Madras.

Finance Statement for the Madras Presidency—*continued.*

	Actual of 1858–59.			Actual of 1859–60.			Actual of 1860–61.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Brought forward - - -	7,25,77,632	6	4	7,64,74,516	9	5	6,88,97,979	8	2
EXTRAORDINARY.									
Miscellaneous - - - -	3,87,443	10	4	2,93,630	14	7	3,08,838	4	5
Construction of Roads, Bridges, &c.	3,84,006	10	7	4,54,853	3	–	6,05,400	4	1
Ditto of Buildings - -	10,98,674	15	10	18,78,241	7	–	9,82,979	11	11
Ditto of Revenual Irrigation Canals, &c. - -	2,83,568	4	5	3,18,677	7	9	4,12,428	9	2
Local Funds - - - - -	1,07,659	14	1	1,08,795	9	3	2,570	–	–
Railway (Compensation for Lands, &c., taken up) - - - -	89,282	1	–	1,15,263	4	5	*	—	
TOTAL, Public Works - - -	19,63,191	13	11	28,75,830	15	5	20,03,378	9	2
TOTAL, Extraordinary - - -	23,50,635	8	3	31,69,461	14	–	23,12,216	13	7
PROFIT AND LOSS.									
Miscellaneous - - - -	44,210	15	2	7,18,027	3	3	7,76,492	8	3
GRAND TOTAL - - - *Rs.*	7,49,72,478	13	9	8,03,62,005	10	8	7,19,86,688	14	–
Deficit met out of the Cash Balance	1,25,14,095	5	4	1,50,19,335	13	8	57,56,020	13	1

* *N.B.*—Removed to the debit of Government of India agreeably to instructions received from the Auditor General of India.

STATEMENT showing the Amount Received and Paid at the late General Treasury and the Bank of Madras on account of Government, during the Official Year 1861–62.

	1861–62. Amount.		
	Rs.	*a.*	*p.*
RECEIPTS.			
Income Tax - - - - - - - - - - -	2,74,395	5	3
Stamps - - - - - - - - - - - -	80,672	8	6
Law and Justice - - - - - - - - -	1,15,879	9	5
Police - - - - - - - - - - - -	29,110	11	11
Public Works - - - - - - - - - - -	88,085	10	–
Loans under liquidation and transfer - - - - - - -	13,08,000	–	–
Service Funds - - - - - - - - - - -	7,26,741	10	4
Local Funds - - - - - - - - - - -	1,18,938	13	4
Deposits - - - - - - - - - - - -	4,43,724	9	5
Remittances in specie and Bank notes - - - - - -	1,78,14,982	1	5
Bills drawn - - - - - - - - - - -	1,67,29,021	2	10
Military Remittances - - - - - - - - -	6,62,189	5	11
Miscellaneous - - - - - - - - - - -	9,09,963	1	9
ACCOUNT CURRENT WITH LONDON.			
Bills payable by the Secretary of State for India in Council - - -	26,791	7	3
Madras Railway Company - - - - - - - - -	11,78,283	8	2
Miscellaneous - - - - - - - - - - -	14,400	11	3
Remittances from other Governments - - - - - -	3,25,424	4	6
Post Office Remittances, Imperial - - - - - -	17,675	4	1
Electric Telegraph Remittances, Imperial - - - - - -	45,555	6	4
Rs.	4,09,09,835	3	8
DISBURSEMENTS.			
Refunds of Income Tax - - - - - - - - -	12,839	13	–
Allowances and Assignments under Treaties and Engagements - -	9,11,912	5	10
Salaries, Establishments, Contingencies, and Pensions - - - -	44,13,486	15	1
Interest on Public Loans - - - - - - - - -	36,00,550	8	11
Interest on Service Funds and other accounts - - - - -	92,554	13	3
Loans under liquidation and transfer - - - - - -	4,900	–	–
Service Funds - - - - - - - - - - -	17,32,622	2	1

Chap. X.
Madras.

Amount received and paid at the late General Treasury and the Bank of Madras, &c.—*continued.*

	1861–62.		
	Amount.		
Disbursements—*continued.*	*Rs.*	*a.*	*p.*
Local Funds	1,19,570	11	8
Deposits	4,05,081	2	11
Remittances in specie	9,75,846	7	11
Remittances of the Public Works Department	7,14,677	9	4
Bills discharged	28,27,492	6	8
Military remittances	85,20,879	9	9
Bullion certificates	44,42,181	4	9
Miscellaneous	5,01,516	12	5
Account Current with London.			
Bills drawn by the Secretary of State for India in Council	3,14,901	15	–
Madras Railway Company	55,15,434	14	10
Irrigation and Canal Company	11,50,480	10	8
Great Southern of India Railway Company	1,89,380	4	–
Miscellaneous	21,698	–	1
Remittances to other Governments	13,00,898	2	10
Post-office remittances, Imperial	1,75,631	2	2
Electric Telegraph remittances, Imperial	1,62,677	–	7
Rs.	381,07,214	13	9
Balance on the 30th April 1861	26,70,003	12	1
Receipts during the Official Year 1861–62	4,09,09,835	3	8
	4,35,79,838	15	9
Payments during the Official Year 1861–62	3,81,07,214	13	9
Balance on the 30th April 1862 - - - *Rs.*	54,72,624	2	–

Abstract of Receipts and Disbursements, from 1st May 1859 to 30th April 1862.

RECEIPTS.

Official Year.	Bank Notes and Cash, Bank of Madras.			Specie.			Transfer.			Total.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
1859–60	2,67,40,762	9	11	2,65,55,102	7	11	2,73,307	13	8	5,35,69,172	15	6
1860–61	2,21,95,430	3	10	1,79,93,262	8	11	19,94,750	–	–	4,21,83,442	12	9
1861–62	1,72,27,219	3	2	2,36,82,616	–	6	-	-	-	4,09,09,835	3	8

DISBURSEMENTS.

Official Year.	Bank Notes and Cash, Bank of Madras.			Specie.			Transfer.			Total.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
1859–60	2,67,31,079	5	9	2,69,30,483	15	5	2,73,307	13	8	5,39,34,871	2	10
1860–61	2,19,14,005	3	6	2,09,09,969	–	6	19,94,750	–	–	4,48,18,724	4	–
1861–62	1,62,86,545	5	2	2,18,20,669	8	7	-	-	-	3,81,07,214	13	9

Statement showing the Increase and Decrease of Expenditure in the Civil Departments of the Presidency, during the Official Year 1861–62.

Number.	Date of Order.	OFFICE.	Monthly Increase.	Monthly Decrease.	Annual Amount of Increase.	Annual Amount of Decrease.
		GENERAL BRANCH.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
G. I. - 4,731	30 Mar. 1861	Deputy Auditor and Accountant General, Madras -	- -	803 – –		
G. I. - 6,445	23 May ,,	Government Secretariat—Mr. Wheeler, for examining and putting in order the old papers in the Government Record Office and those of other offices (temporary) - - - - - - - - -	120 – –	—		
G. I. - 5,544	7 May ,,	Deputy Auditor and Accountant General— Three assistants, at 25 rupees each, temporary Rs. 75 Six ditto, at 20 rupees each - ,, temporary. - 120	195 – –	—		
M. G. - 961	3 July ,,	Government Secretariat, Public Department - -	- -	5 – –		
G. I. - 8,223	2 July ,,	Telugu translator—Moonshee - - - Rs. 70 to Rs. 120 Writer - - - 20 to 35	65 – –	—		
M. G. - 1,477	24 July ,,	Superintendent of Stamps and Mint Master - -	208 – –	—		
M. G. - 1,085	26 July ,,	Government Secretariat, Public Department - -	- -	15 – –		
M. G. - 989	6 Aug. ,,	Persian and Hindustani translator—Writer, temporary	20 – –	—		
M. G. - 426	13 Aug. ,,	General Treasury—Two gollahs, at 7 rupees, temporary	14 – –	—		
G. I. - 11,830	27 Aug. ,,	Civil Paymaster's Office, Madras - - - - -	16 – –	—		
M. G. - 1,554	22 Nov. ,,	Government Secretariat, Public Department - -	- -	50 – –		
M. G. - 4,741	21 Dec. ,,	Resident Hyderabad, Mutsuddy, temporary - -	- -	17 2 5		
M. G. - 62 G. I. - 1,319	14 Jan. 1862 Feb. ,,	Clerk of the Council— Salary - - - - - - - Rs. 1,000 Establishment - - - - - - 300	1,300 – –	—		
G. I. - 3,639	20 Dec. 1861	Stationery Office—Manager, 100 to 150 - - -	50 – –	—		
G. I. - 1,149	25 Jan. 1862	Deputy Auditor and Accountant General—Establishment - - - - - - - - -	597 – –	—		
G. I. 1,712-13	6 Mar. ,,	Mint Office—Increase of salary to the Mint Master and his Establishment - - - - - - -	697 – –	—		
M. G. Notification	5 Feb. ,,	General Treasury, Madras—Salary of Sub-Treasurer and that of his Establishment, exclusive of the portion transferred to the Deputy Accountant General -	- -	2,968 – –		
G. I. 4,315-18	27 Mar. 1861	Canarese Translator's Office—Establishment, temporary for six months - - - - - - - -	20 – –	—		
G. I. - 795	18 June ,,	A temporary establishment for the Committee at Madras for simplifying routine business in the different offices	22 – –	—		
		Rs.	3,324 – –	3,858 2 5	39,888 – –	46,297 13 –
		MEDICAL BRANCH.				
M. G. - 918	27 June 1861	Principal Inspector General, Medical Department, two writers on 65 and 30 rupees, temporary - - -	95 – –	—		
G. I. - 798	18 Jan. ,,	Hospital establishment at Dowlaishwarum, a permanent increase - - - - - - - - -	10 12 –	—		
G. I. 4,707-9	12 Apr. ,,	Civil Dispensary, Tranquebar, a permanent increase -	86 – –	—		
G. I. 4,929-31	17 Apr. ,,	Hospital at Bezorah, a permanent increase - - -	4 – –	—		
M. G. - 11 M. G. - 862	6 Jan. 1862 17 Apr. ,,	North Canara, medical establishment - - -	- -	646 2 10		
		Rs.	195 12 –	646 2 10	2,349 – –	7,754 2 –
		ECCLESIASTICAL BRANCH.				
G. I. - 1,343	1 Feb. 1861	Church at Chicacole—Peon - - - - - -	5 4 –	—		
G. I. - 1,912	18 Mar. 1862	Chaplaincy, Ootacamund—One Lascar - - -	7 – –	—		
M. G. - 195	28 June 1861	Scottish Church - - - - - - -	- -	21 – –		
M. G. - 132	28 Apr. 1862	Assistant Chaplain, Black Town - - - -	100 – –	—		
		Rs.	112 4 –	21 – –	1,347 – –	252 – –
		EDUCATIONAL BRANCH.				
M. G. - 11 M. G. - 862	6 Jan. 1862 17 Apr. ,,	North Canara - - - - - - - - -	- -	50 – –	- -	600 – –
		PUBLIC WORKS BRANCH.				
M. G. - 11 M. G. - 862	6 Jan. 1862 17 Apr. ,,	North Canara, Public Works Department - -	- -	3,310 14 –		
M. G. - 961 G. I. - 4,691	20 May 1861 8 Apr. ,,	Collector of Bellary—Two nugantis, on 4 rupees each - - - - - - - - -	8 – –	—		

STATEMENT showing the Increase and Decrease in the Civil Departments, &c.—*continued.*

Number.	Date of Order.	OFFICE.	Monthly Increase	Monthly Decrease.	Annual Amount of Increase.	Annual Amount of Decrease.
			Rs. *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*	*Rs.* *a.* *p.*
M. G. - 1,271	1 July 1861	Tanjore District—Establishment, from 535 rupees to 640 rupees	105 - -	—		
M. G. - 1,438 G. I. - 1,358	2 Aug. „ 13 Jan. 1862	Malabar District:—Additional establishment from 300 rupees to 375 rupees	75 - -	—		
M. G. - 1,649	30 Aug. 1861	Kistna District:— Needamal Lock - *Rs.* 47 Carumputly Lock - 34 For nine months	81 - -	—		
M. G. - 2,399	24 Dec. „	Trichinopoly District—Pay of two apprentices from 7 rupees to 9 rupees	4 - -	—		
M. G. - 172	10 Feb. 1862	Tanjore District:—Neernaikum establishment from *Rs.* 447. 2. to *Rs.* 545. 14.	98 12 -	—		
M. G. - 2,297	13 Dec. 1861	Supernumerary Assistant Engineer and his establishment	- - -	455 - -		
M. G. - 2,255	20 Sept. 1859	1st Class Probationer	- - -	200 - -		
		Rs.	371 12 -	3,965 14 -	4,461 - -	47,590 8 -
		JUDICIAL BRANCH.				
G. I. - 5,564	9 May 1861	Principal Sudder Ameen's Court, Mangalore, temporary	- - -	163 - -		
G. I. - 8,903	3 July „	Civil Court, Calicut—Two attendants, at 4 rupees each	8 - -	—		
G. I. - 2,015 G. I. - 10,686	24 Aug. „ 29 Aug. „	Civil Court, Calicut—Establishment	44 - -	—		
M. G. - 991	6 Aug. „	Principal Sudder Ameen's Court, Chingleput	- - -	404 8 -		
M. G. - 408	6 Aug. „	Peons and messengers in the Mofussil	- - -	824 4 -		
G. I. - 11,588	19 Sept. „	Sudder Ameen's Court, Sircy, temporary	- - -	20 - -		
G. I. - 12,823	11 Sept. „	Small Cause Court, Madras, Hindustani translator, from 70 rupees to 100 rupees	30 - -	—		
G. I. - 12,330	28 Sept. „	Civil and Session Court, Tanjore—Establishment, temporary	440 - -	—		
M. G. - 1,239 and Ditto - 24	7 Sept. „ 8 Jan. 1862	Gaol at Itchapore	- - -	72 - -		
M. G. - 192	8 Feb. „	Additional Principal Sudder Ameen, Mangalore	- - -	693 - -		
M. G. - 379	7 Mar. „	Principal Sudder Ameen, Nellore	- - -	50 - -		
M. G. - 71	15 Jan. „	Sudder Court, Madras—10 extra translators on 70 rupees each, for 12 months	700 - -	—		
G. I. - 13,197	7 Oct. 1861	Gaol at Ootacamund—Establishment	506 - -	—		
M. G. - 927	19 July „	Principal Sudder Ameen's Court, Trichinopoly—Establishment	- - -	954 8 -		
M. G. - 927	19 July „	Moofty Sudder Ameen's Court, Chicacole—Establishment	- - -	227 - -		
M. G. - 154 M. G. - 459	1 Feb. 1862 8 Mar. „	Sudder Ameen's Court, Itchapore—Abolished	- - -	312 - -		
M. G. - 192	8 Feb. „	Principal Sudder Ameen's Court, Mangalore—Abolished	- - -	687 - -		
G. I. 1,778-79	16 Feb. 1861	Warders in certain Gaols in the Madras Presidency	276 - -	—		
M. G. - 379	7 Mar. 1862	Principal Sudder Ameen, Nellore—Abolished	- - -	500 - -		
G. I. - 2,411	28 Mar. „	Coroner's Office:— Interpreter's salary, from 52½ rupees to 70 rupees Constable, from 35 rupees to 50 rupees	32 8 -	—		
M. G. - 11 M. G. - 862	6 Jan. „ 17 April „	North Canara—Judicial Department	- - -	5,510 5 4		
G. I. - 2,598	7 April „	Small Cause Courts to be newly established in the Mofussil	662 8 -	—		
G. I. - 2,905	15 April „	Increase to salaries of District Moonsiffs and their Establishments	14,320 - -	—		
		Rs.	17,019 - -	10,417 9 4	2,04,228 - -	1,25,011 - -
		POLICE.				
M. G. - 11 Ditto - 862	6 Jan. 1862 17 April „	North Canara—Police establishment	- - -	1,000 - -		
M. G. - 193	8 Feb. „	Police establishment at Saint Thomas' Mount	- - -	117 - -		
M. G. - 555-556 M. G. - 2,046	11 April „ 5 Nov. 1860	Hurpanabully Taluq, Bellary	- - -	146 - -		
M. G. - - -	5 Nov. „	Madacaseera Taluq, Bellary	- - -	136 - -		
		Rs.	—	1,399 - -	- - -	16,788 - -

STATEMENT showing the Increase and Decrease in the Civil Departments, &c.—*continued.*

Number.	Date of Order.	OFFICE.	Monthly		Annual Amount of Increase.	Annual Amount of Decrease.
			Increase.	Decrease.		
			Rs. a. p.	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*
		MAGISTERIAL.				
M. G. - 11 Ditto - 862	6 Jan. 1862 17 Apr. „	North Canara—Magisterial establishments - -	- -	450 – –		
M. G. - 1,200	14 June 1861	Ganjam—10 Sub-magistrates - - - - - -	1,010 – –	—		
M. G. - 1,209 M. G. - 837	15 June „ 28 June „	Vizagapatam—13 Sub-magistrates - - *Rs.* 1,342 - - - 2 ditto - - - 268	1,610 – –	—		
M. G. - 1,251	26 June „	Godavery—12 Sub-magistrates - - - -	1,188 – –	—		
M. G. - 1,184 M. G. - 1,093	12 June „ 21 Sept. „	Bellary—Military joint magistrate's establishment -	9 – –	—		
M. G. - 1,848	21 Sept. „	Falany Hills, Madura—Sub-magistrate and his establishment - - - - - - - -	84 – –	—		
M. G. - 1,229	2 Oct. „	Military joint magistrate, Paumben—Establishment -	32 – –	—		
M. G. - 1,924	5 Oct. „	Tinnevelly—Eight sub-magistrates - - - -	762 – –	—		
M.G. - 1,489	3 Dec. „	Poonamallee—Office of joint magistrate - - -	- -	200 – –		
		Rs.	4,695 – –	650 – –	56,340 – –	7,800 – –
		REVENUE BRANCH.				
G. I. - 6,134	14 May 1861	Board of Revenue establishment - - - - -	- -	22 8 –		
M. G. - 1,280	28 June „	Tinnevelly—Pearl Fishery establishment, temporary -	87 – –	—		
M. G. - 267	28 May „	Madras Sea Customs—Salary of the Collector - -	- -	166 10 8		
M. G. - 267	28 May „	Vizagapatam—Collector's salary - - - - -	- -	166 10 8		
M. G. - 1,910	2 Oct. „	Ganjam—Principal Assistant's establishment - -	- -	41 – –		
M. G. 555 & 556 M. G. - 2,046	11 Apr. 1860 & 5 Nov. „	Coimbatore—Suttemungalum Taluq - - -	- -	530 8 –		
M. G. - 1,910	2 Oct. 1861	Vizagapatam—Principal Assistant's establishment -	20 – –	—		
M. G. - 11 M. G. - 862	6 Jan. 1862 17 Apr. „	North Canara—Revenue Department, inclusive of Forest Conservancy - - - - - - -	- -	11,444 10 8		
M. G. - 670	21 Mar. 1861	Bellary—Establishment for preparing field registers -	- -	125 – –		
M. G. 555 & 556 M. G. - 2,046	11 Apr. 1860 5 Nov. „	Revenue and Intelligence Departments, Bellary -	- -	472 9 –		
M. G. - 142	30 Jan. 1862	Pearl Fishery, temporary - - - - - -	266 – –	—		
M. G. - 337	15 Feb. „	Madras Collector - - - - - - - -	36 8 –	—		
M. G. - 422	26 Feb. „	Saltpan at Varany, Nellore - - - - - -	- -	43 – –		
M. G. 555 & 556 M. G. - 2,046	11 Apr. 1860 5 Nov. „	Madacaseera Taluq—Bellary - - - - - -	- -	378 14 –		
M. G. - 712	31 Mar. 1862	Saltpan at Viziaputty, Tinnevelly - - - - -	- -	56 – –		
M. G. 2,148 & 405	11 Nov. 1861 25 Feb. 1862	Stamp vendor in the Mofussil - - - - -	- -	1,537 – –		
M. G. - 517	3 May „	Board of Revenue - - - - - - -	- -	7 8 –		
M. G. - 421	26 Feb. „	Bellary Collector—Record-keeper - - - - -	- -	15 – –		
M. G. - 512	10 Mar. „	Nellore, Salt Superintendent, a month, temporary -	40 – –	—		
		Rs.	449 8 –	15,006 15 –	5,394 – –	1,80,083 4 –
		REVENUE SURVEY and SETTLEMENT.				
M. G. - 573	14 Mar. 1862	Establishment, temporary - - - - - *Rs.*	30 – –	- -	360 – –	
		INCOME TAX.				
M. G. - 739	3 Apr. 1862	Establishment - - - - - - - - -	- -	566 – –		
M. G. - 1,180	27 May „	Collector, Madura—Establishment - - - - -	- -	4 – –		
		Rs.	—	570 – –	- - -	6,840 – –
		POLITICAL.				
G. I. - 2,436	29 Mar. 1862	Commissioner, Mysore—Establishment - - -	70 – –	—		
M. G. - 398	16 Sept. „	Government Agent at Chepauk—Moochee - -	- -	10 – –		
		Rs.	70 – –	10 – –	840 – –	120 – –
		MARINE.				
M. G. - 811 Ditto - 26	6 Jan. 1862 17 Apr. „	North Canara—Marine - - - - - -	- -	11 – –		
M. G. - 7 Ditto - 144	4 Jan. „ 30 Jan. „	For working the diving apparatus at Tuticorin, for four months, temporary - - - - - -	230 – –	—		
M. G. - 312	28 Sept. 1861	Marine establishments—Outports - - - - -	1,112 – –	—		
G. I. - 14,713	26 Dec. „	Master Attendant's Office, Madras—Three peons, at seven rupees each - - - - - - -	21 – –	—		
M. G. - 2,201	29 Nov. „	Pier Establishment :— *Rs. a. p.* 2 Boatswains, at 35 rupees each - 70 – – 1 Duffadar - - - - 10 8 – 6 Peons, at 7 rupees each - - 42 – – 4 Toll-takers, at 15 rupees each - 60 – –	182 8 –	—		
		Rs.	1,545 8 –	11 – –	18,546 – –	132 – –

12 July 1862.

(signed) *W. J. Raynor,*
Officiating Civil Paymaster.

Chap. X.
Madras.

Appendix, No. VIII.

Dewan's General Report on Cochin for the Years 1035 and 1036, m. e.

JUDICIAL.

Civil and Criminal.—The subjoined are statements of Civil Suits filed and disposed of in the Moonsiff's Courts of Chittoor and Ernacollum, in the Zillah Courts of Ernacollum and Trichoor in the Small Cause Courts and in the Appeal Court, in the years under report, and of suits remaining on the file:—

—	Years.	On the File.	Filed.	Total.	Disposed of.	Remaining.
Civil Suits in the two Moonsiffs' Courts	1035	33	164	197	152	45
	1036	45	343	388	273	115
Civil Suits in the two Zillah Courts	1035	488	1,213	1,701	1,022	679
	1036	679	1,244	1,923	1,492	431
Civil Suits in the two Small Cause Courts	1035	—	—	—	—	—
	1036	- -	466	466	30	436
Civil Suits in the Appeal Court	1035	137	94	231	87	144
	1036	144	76	220	126	94

	Years.	Number of Cases executed.	Remaining unexecuted.
Civil Decrees executed	1035	401	3,625
	1036	420	3,756

The subjoined are statements of Criminal Cases filed and disposed of in the several Courts of Criminal Jurisdiction:—

—	Years.	On the File.	Filed.	Total.	Disposed of.	Remaining.
Criminal Cases before a single Judge of the Criminal Courts	1035	—	—	—	—	—
	1036	- -	3	3	2	1
Criminal Cases in the two Zillah Criminal Courts	1035	35	185	220	196	24
	1036	24	143	167	149	18
Criminal Cases in the Sessions Court	1035	6	41	47	46	1
	1036	1	39	40	33	7
Criminal Cases in the Appeal Court	1035	15	8	23	14	9
	1036	9	10	19	19	—

In the year 1036 m. e., certain changes took place in the constitution of the courts of this country, and the salaries of the judges were raised.

The scale of pay for the Appeal Court was fixed as follows:—

First Judge - - - - .	400 rupees per mensem.
Second ditto - - - - -	350 - ditto.
Third ditto - - - - -	200 - ditto.
Establishment - - - - -	250 - ditto.

The scale of pay previously to this change was—

First Judge - - - - -	200 rupees per mensem.
Second ditto - - - - -	130 - ditto.
Third ditto - - - - -	70 - ditto.

The scale of pay for the Zillah Courts was fixed as follows:—

First Judge	175 rupees per mensem.
Second ditto	150 - ditto.
Third ditto	100 - ditto.
Establishment	150 - ditto.

The new rates of pay, however, for the Zillah Courts are only to come into operation when the judges have fully qualified themselves for the discharge of their official duties, according to the new forms of procedure. Till then the rates of pay to be as below:—

First Judge	140 rupees per mensem.
Second ditto	100 - ditto.
Third ditto	75 - ditto.

The rates of pay originally, or previous to these changes, were—

First Judge	100 rupees per mensem.
Second ditto	70 - ditto.
Third ditto	50 - ditto.

Two Moonsiffs' Courts were also established in the year 1036 M. E., one at Ernacollum and the other in the Chittoor district.

The rates of pay have been fixed as follow:—

Ernacollum Moonsiff	70 rupees per mensem.
Chittoor - ditto	50 - ditto.

The subjoined statement exhibits the number of criminal cases remaining undecided before a single judge of the criminal courts, and the number of prisoners in the Ernacollum and Trichoor Gaols in the years under report, and also the time the cases were pending before these courts:—

In 1035.			In 1036.		
Number of Cases.	Number of Prisoners in the Gaol.	Number of Years the Cases were pending.	Number of Cases.	Number of Prisoners in the Gaol.	Number of Years the Cases were pending.
4	10	2	2	- -	2
30	21	1	24	49	1

Subjoined is a statement of police cases filed and disposed of by the district police officers in the years under report:—

Years.	On the File.	Disposed of.	Remaining.
1035	1,141	1,018	123
1036	1,285	1,221	64

GAOLS.—The same as in the preceding Report.

MARINE, and PORTS and HARBOURS.—The same as in the previous Report.

LIST of VESSELS built and repaired within the Cochin Territory, during the Years 1035 and 1036, M. E.

Where Built or Repaired.	Names of the Owners or Agents.	In 1035.				In 1036.			
		Newly Built.		Repaired.		Newly Built.		Repaired.	
		Brig or Schooner.		Bagala.		Bagala.		Bagala.	
		No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Cochangady in Cochin	Arab Sheik Dyan	1	540	–	–	–	–	–	–
Ditto - ditto	Ditto - ditto	–	–	1	100	–	–	–	–
Ditto - ditto	Ditto - ditto	–	–	1	75	–	–	–	–
Jews' Town ditto	Arab Hydross Abonshar	–	–	1	75	–	–	–	–
Ditto - ditto	Arab Sheik of Arabia	–	–	1	50	–	–	–	–
Cochangady ditto	Nagoojee of Muttoncherry	–	–	–	–	–	–	1	43
Ditto - ditto	Arab Mahomed of Muscat	–	–	–	–	–	–	1	151
Jews' Town ditto	Jew Elliavo	–	–	–	–	–	–	1	83
Ditto - ditto	Arab Abdoola of Muscat	–	–	–	–	1	160	–	–

FORESTS.—

Forests.—Nothing new under this head.

Education.—As in the previous Reports.

Post Office.—As in the previous Reports.

Public Works.—In the year 1036 the work of a bridge to be built across the Ponany River at Shoranoor commenced.

The bridge is to be a wrought-iron girder-bridge of 13 bays, 64 feet opening, and the estimated cost of it is 1,55,300 rupees.

The sum advanced for this work in the year above mentioned was 16,000 rupees.

The bridge is to be substantially built, as it is to be a railway bridge.

Military.—As before.

Population.—No new census has been taken.

Vaccination.—Annexed is a statement showing the number of persons vaccinated in the years under report, with a proportion of successful and unsuccessful cases:—

Years.	Vaccinated.	Successful Cases.	Unsuccessful Cases.
1035 - - - -	9,260	8,388	872
1036 - - - -	7,795	6,896	899

Hospitals and Dispensaries.—The number of in and out-patients in the year under report is as follows:—

HOSPITAL.

Years.	In-patients.			Out-patients.		
	Admitted.	Discharged or Cured.	Died.	Admitted.	Discharged or Cured.	Died.
In 1035 - - -	186	182	4	1,402	1,376	26
1036 - - -	280	246	7	1,750	1,730	20

Financial.—Subjoined is a statement showing the receipts and disbursements in the years under report.

STATEMENT.

Years.	Receipts.			Disbursements.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*
In 1035 - - - - -	10,29,151	7	7	9,35,360	14	6
„ 1036 - - - - -	11,41,997	10	8	8,81,167	5	–

Statement showing the Revenue collected in the years under report.

	Years,	Export. Rs.	a.	p.	Import. Rs.	a.	p.	1035. Rs.	a.	p.	1036. Rs.	a.	p.
* Amount of land and garden revenue								4,74,147	6	–	5,72,711	1	7
Customs	1035	12,193	–	9	27,724	8	9	30,917	9	6	—		
	1036	16,960	5	2	58,766	4	11	-	-	-	75,726	10	1
Excise or abkarry								5,680	7	4	4,589	4	–
Stamps								2,702	2	8	2,628	10	11
Salt								1,96,100	8	8	1,95,563	5	10
Tobacco								73,004	5	3	36,160	4	7
Teak and Blackwood logs, &c.								45,942	15	4	36,222	10	10
Pepper								2,285	6	3	109	–	–
Cardamoms and other forest produce								3,071	–	4	4,096	–	10
† Miscellaneous revenue								84,093	12	6	1,20,400	–	11
Total								9,26,945	9	10	10,48,207	1	7
Balance in the Treasury								1,02,205	10	9	93,790	9	1
Total								10,29,151	4	7	11,41,997	10	8

Ten lacs and 50,000 rupees are invested in Government Securities.

* The increase of nearly a lac of rupees is owing to a slight alteration in the commutation rate of paddy.

† Fees and fines in the Judicial establishment are included in this item.

(signed) *T. Shungoony Menon*, Dewan.

Hoozoor Cutcherry, in Trichoor,
Cochin, 24 May 1862.

(True copy).

(signed) *W. Fisher*, Resident.

Dewan's Report on the Administration of Travancore, for the year 1036 (1860–61).

JUDICIAL.

Civil Justice.—The following statement shows the amount of business transacted in the Civil Courts in the year under review:—

—	Civil Suits. Pending on the 1st Chingom 1036.	Civil Suits. Filed.	Civil Suits. Total.	Civil Suits. Disposed of.	Civil Suits. Pending.	Re-investigation Suits. Pending on the 1st Chingom 1036.	Re-investigation Suits. Filed.	Re-investigation Suits. Total.	Re-investigation Suits. Disposed of.	Re-investigation Suits. Pending.	Amount of Institution and other Fees. Rs.
Appeal Court	338	155	493	182	311	61	26	87	33	54	3,553
Zillah Court	620	1,111	1,731	1,008	723	–	–	–	–	–	18,478
Moonsiff's Court	764	4,429	5,193	4,257	936	–	–	–	–	–	9,188
Total	1,722	5,695	7,417	5,447	1,970	61	26	87	33	54	31,219

The following is a comparison of the results for two years:—

Year.	Remained.	Filed.	Total.	Decided.	Remaining.	Fees collected. Rs.
1035	1,694	5,981	7,675	5,953	1,722	33,108
1036	1,722	5,695	7,417	5,447	1,970	31,219

Criminal Justice.—The work done in the Criminal Courts is represented below:—

Year.	Cases.					Prisoners.			Total Amount of Rations.
	Remained.	Filed.	Total.	Decided.	Remaining.	Remained and Admitted.	Discharged.	Remaining.	
									Rs.
1035 - -	99	935	1,034	998	36	2,694	2,351	343	7,925
1036 - -	36	688	724	658	66	1,905	1,617	288	6,698

Considering that, owing to the extraordinarily high prices of food in the country in the year under review, there were unusual incentives to crime, it is gratifying to note that there was little additional crime committed.

There has been no important new legislation this year; but the efforts of the judges have been steadily directed to improve the practical working of the courts.

Superannuation pensions have been granted to some judges.

A re-distribution of judicial work has been planned, so as to apportion responsibility more definitely, and also to expedite the despatch of business.

The introduction of the Civil Procedure Act of British India, with a few necessary modifications, has been resolved upon.

A scale of more adequate salaries to judicial officers has received the sirkar's sanction.

All these improvements have already been carried out, but as they belong to the year 1037, they will be dwelt upon in greater detail in the next Report.

Police.—The records of the police for the year under review exhibit 8,459 cases tried and disposed of, against 6,749 in the preceding year. Though the total number of cases was thus larger, it is satisfactory to remark that there is no reason to suppose an increased prevalence of the graver crimes.

The employment of a large number of men on the public works in the south of Travancore gave them legitimate means of earning a livelihood in this hard season, and contributed not a little to the diminution of crime.

Steady efforts have been continued to expedite the transaction of business in this department, and the results have been encouraging.

Cases are now decided more promptly, and there are no arrears at the end of the year.

Reliable popular testimony, on all hands, is not wanting to show that corruption and oppression in this, as in other branches of the administration, have very greatly diminished.

Gaols.—The inmates of the gaols at the close of the year were 543, of whom 11 were females. Of this number 40 were life prisoners; 39 sentenced to hard labour for periods from 16 to 28 years; 48 from 11 to 15 years; 78 from six to 10 years; the rest for less than five years.

The number of deaths in the gaol was 174. Out of 1,192 prisoners admitted into the establishment throughout the year, 58 died of cholera, 47 of smallpox, 53 of dysentery, the rest died of miscellaneous diseases. This mortality is to be much deplored, but it was more or less due to the character of the year; four prisoners escaped from the gaol; of these three were recaptured.

Land Revenue.—The out-turn was about twelve and a half lacs of rupees, being less than that of the preceding year by upwards of two lacs. This deficiency is due to large remissions of tax which became necessary in consequence of the extraordinarily adverse character of the season.

There was much distress in consequence of the failure of crops. The price of food rose higher than ever known before, and thousands of men, women, and children had no resource but charity to look to for bare existence.

The sirkar was not wanting in exertions to mitigate this distress as far as it lay in its power.

Food was given gratuitously to the poor in several localities, as also cloths, small sums of money, and other similar aids.

Such as were ablebodied were provided with work on the roads and canals.

Private charity, too, contributed largely to the relief; and it is only right to notice here with every prominence the liberality of England at this juncture.

The British Government kindly granted the request of the Sirkar to suspend the duty on the exports of grain and rice to Travancore from British territory; and this concession, in conjunction with a similar removal of import duty on the part of the Sirkar, contributed to the influx into the country of a large quantity of food.

Some idea of the extent of the relief operations may be formed from the following statistics:—

1. Market value of rice and paddy, &c., gratuitously given to the poor, about 50,000 rupees.

2. Value of rice purchased on account of the sirkar at Mangalore and brought down here and resold to the poor at rates advantageous to them, about 21,000 rupees.
3. Market value of sirkar paddy sold to the poor, about 11,000 rupees.
4. Expenditure in the year on roads and canals in South Travancore, by which the poor obtained the means of subsistence, about 1,23,000 rupees.
5. Value of imports of grain and rice in 1036, about 12,00,000 rupees.
6. Estimate of the extent of relief from Madras, England, &c., from 12,000 to 15,000 rupees.
7. Subscriptions raised in Travancore, about 13,000 rupees.

Customs.—The revenue from the Customs amounted to 2,71,608 rupees, being higher than that of the preceding year by 52,758 rupees: in fact, the revenue of the year under report is the highest on record for a long series of years. The increase is due mainly to larger exports. The excess of course does not include the duty on pepper, which amounts to 44,204 rupees. The monopoly of this article was abolished on the 19th Dhanoo 1036 (1st January 1861), and an export duty substituted. The account of the duty levied on pepper has been kept separate, as it is desirable to watch it carefully for some time.

The following Statement shows the Quantities and Tariff Values of the principal Exports.

Articles.		—	—
		Candies.	*Rupees.*
Chickney		2,902$\frac{21}{32}$	3,52,466
Coppra		33,032$\frac{5}{8}$	7,78,098
Cocoa-nut oil		4,111$\frac{9}{32}$	2,17,121
Coir		15,822$\frac{7}{8}$	2,67,926
Dry ginger		2,960$\frac{7}{16}$	1,69,189
Molasses		1,492$\frac{15}{16}$	51,749
Tamarind		8,243	68,807
Coffee		252$\frac{1}{8}$	22,612
Cutchotum or meadow saffron		175$\frac{7}{16}$	15,040
Cocoa-nuts	*No.*	60,66,516	69,332
Areca-nuts		3,54,17,625	75,897
Beetle leaves	*Bundles*	13,18,217	20,014
Mats of all sorts	*Score*	30,952$\frac{3}{4}$	19,127
Wooden logs, beams, planks, &c.		- - -	89,130
Salt-fish	*Bundles*	54,741	44,729
		Total - - *Rs.*	22,61,237

As it was about a quarter of a century since the tariff of values had been framed, it failed to bear that correspondence with existing market values, which is desirable; so the revision of the export tariff was undertaken and effected. In many respects, the values were assimilated to those of the British Indian tariff; while in some cases, where local peculiarities rendered it necessary, some judicious deviations have been made. The new export tariff was brought into force on the 31st Auny 1036 (13th July 1861).

It will bring in an accession of revenue to the Sirkar of about half a lac of rupees annually, without any sensible pressure on the sources of production. It will do away also with much scope which had previously existed for corrupt practices in the classification of goods.

The working of the new tariff, as observed up to the time of drawing up this Report, has been as satisfactory as it could possibly be.

Salt.—The sales have been as follow:—

Year.	Quantity sold. *Parahs.*	*Garce.*	Amount. *Rs.*
1035	13,13,209	or 3,419$\frac{13}{16}$	3,86,687
1036	13,54,294	or 3,526$\frac{51}{64}$	4,11,116

This shows an increased consumption of Sirkar salt of upwards of 40,000 parahs or about a hundred garce, yielding an increase of revenue of about 24,000 rupees.

Tobacco.—The sales of this article were materially influenced by the high prices of food, which absorbed a larger proportion than usual of the earnings of the people, and so, less could be laid out on the purchase of tobacco.

The sales were—

	Candies.	*Rs.*
In 1035	4,765$\frac{1}{4}$	17,11,754
„ 1036	3,940$\frac{7}{8}$	13,50,731

The fall in the revenue is due also to another cause, namely, the reduction of the selling price of tobacco.

Pepper.—It may be necessary to premise here that pepper forms a staple product of the country. It is largely grown and commands a good price in the market. Up to the year under review, it was an article of Sirkar monopoly. The growers were bound to deliver the product into the Sirkar's stores and to receive its price at a fixed rate. The Sirkar collected all the pepper at the port of Allepey, and annually sold it to the highest bidders. This system of taxing the product was found oppressive, from the exactions of petty officials, and also from the lower rate of price paid to the grower in reference to the market prices of pepper. In this year, therefore, the system was changed. The monopoly was abolished. An export duty of 15 rupees per candy, which comes to about 20 per cent. on its value, was substituted. This considerable reduction of taxation, as compared with what it had been before, combined with the change in the mode of levying it, is expected to produce much eventual benefit.

Under the influence of far more remunerative returns, the growth of pepper must largely increase in a few years, to the great advantage of both the people and Government.

A few statistics are subjoined.

	Cands.	*lbs.*
Quantity of pepper sold by the Sirkar in 1035 - -	5,958	- 77½
Ditto - ditto before the abolition of monopoly -	1,165	- 376⅞

Duty levied on pepper exported in the year after the abolition of monopoly (2,835 Candies, 274¾ lbs.) - - *Rs.* 43,428. 5.

Other Articles.—The sales of cardamoms, ivory, bees-wax, &c. were—

	Cardamoms.		Ivory.				Bees-wax.		
	Cans.	*lbs.*	*Rs.*	*Cans.*	*lbs.*	*Rs.*	*Cans.*	*lbs.*	*Rs.*
In 1035 -	156	$473\frac{11}{16}$	1,18,280	1	215_{16}	2,162	7	45	2,376
„ 1036 -	72	293	1,72,458	1	250	2,526	8	217	2,936

The quantity of cardamoms collected this year was about a half of that in 1035. But the prices fetched in the market were exceedingly advantageous. It may be interesting to give here the prices for a series of years.

	Rate per Candy.
In 1028 - - - - -	500 rupees
„ 1029 - - - - -	452½ „
„ 1030 - - - - -	575 „
„ 1031 - - - - -	661 „
„ 1032 - - - - -	525 „
„ 1033 - - - - -	555 „
„ 1034 - - - - -	670 „
„ 1035 - - - - -	755 „
„ 1036 - - - - -	1,214 „

Miscellaneous.—The revenue under this head was—

In 1035 - - - - - - -	4,35,521 rupees.
„ 1036 - - - - - - -	2,89,437 „

This head of revenue, comprehending as it does a very large number of items, is subject to much fluctuation. It cannot be interesting to those for whom this Report is intended, to enter into the details of the causes of the fall now shown.

Mint.—The following statement for five years, showing the extent of silver coinage in his Highness's Mint, may not be uninteresting:—

1032 - -	Chuckroms coined in number - -	5,34,513
1033 - -	ditto - - ditto - -	2,38,571
1034 - -	ditto - - ditto - -	39,44,935
1035 - -	ditto - - ditto - -	52,29,622
1036 - -	ditto - - ditto - -	3,82,326
	Velly Fanams - - - - -	1,30,669

Abkarry.—The revenue under this head was—

In 1035 - - - - - -	58,147 rupees
„ 1036 - - - - - -	60,488 „

As opium is largely used in some parts of the country, it has been deemed desirable to tax its consumption also. It is expected to yield 20,000 rupees a year.

Education.—The subjoined abstract exhibits the state of his Highness the Maharajah's Free School at the close of the preceding year, and that during the year under review, and at the close of it.

Number of Boys remaining at the end of 1035.	Number admitted during 1036.	Total under Instruction during 1036.	CASTES.	Number removed during 1036.	Number of Boys remaining at the end of 1036.
41	22	63	Brahmins - - - -	13	50
36	33	69	Paundy Sudras - - -	7	62
44	39	83	Malayali Sudras - - -	8	75
7	4	11	Protestant Christians - -	4	7
23	8	31	Roman Christians - - -	7	24
—	2	2	Syrian Christians - - -	- -	2
1	3	4	Mahomedans - - -	- -	4
1	1	2	Chettriars - - - -	- -	2
—	4	4	Castes below Sudras - -	- -	4
153	116	269	Total - - -	39	230

It will be perceived that a much larger number of youths are now enjoying the benefits of education, and it is hoped that a still larger number will be shortly under instruction.

The regular study of the vernacular language, to which but little attention had previously been paid, has now been introduced. A competent Malayalum Moonshee was appointed, and the Malayalam language as well as English is now studied by all the pupils in the upper classes. Since the appointment of Mr. J. Bensley as head master of his Highness the Rajah's Free School at Trevandrum, several improvements have taken place, and though they belong to the year following that under report, it is deemed as well to notice them briefly in this Report. All the classes themselves in the school were re-arranged, in order that a larger number of boys might be received into the establishment. The number of teachers was augmented and larger salaries were allowed them, and the number of scholars has been raised to 250. The course of study in the first class has been assimilated as closely as desirable with that in the highest class of the junior department of the Presidency College at Madras. A class has also been formed with the view of specially training a certain number of boys for the Public Works Department. The head master and his assistants have performed their duties with the utmost zeal and diligence.

The district schools (English and vernacular) are also doing good work. The time has now come for placing these useful institutions under the direction of a distinct officer. This has been recently done, and much benefit is expected from the arrangement.

The Mission seminaries at Cottayam and Nagercoil, and the other Mission schools in the country, are steadily doing their work.

There are two tolerably well conducted vernacular periodicals published by the English Missionaries at Cottayam and Nagercoil. They are the vehicles of useful popular information, and promise to grow in importance.

Some very useful little books in Malayalam are occasionally issued from the Church Mission Press at Cottayam.

Under these several influences, the Malayalam language is improving, and in time much knowledge of a popular character will be placed within the reach of the great bulk of the natives.

With a view, in some measure, to encourage useful publications, the Sirkar advertised the offer of two prizes, one for 150 rupees, and the other for 75 rupees. The result has been satisfactory, and some of the best compositions are in the press for general circulation.

It may be generally remarked that even the most superficial observer cannot fail to notice the increasing spread of knowledge and intelligence among all classes of the people. They are beginning to be better able to distinguish between right and wrong; and the visible improvement in native public opinion cannot fail to influence beneficially almost all the concerns of the community.

It may not be uninteresting to state that the effects of the useful education imparted in his Highness's school, and other institutions, are beginning to be felt in the management of public business, wherever educated men are employed. These men are doing useful service in a manner which is highly encouraging.

Public Works.—The operations of this department in the year under report have been extensive.

They were for several months under the control of Mr. Collins, the civil engineer. But the services of Mr. Collins failed to afford satisfaction to the Sirkar, and were therefore dispensed with.

Major T. Greenaway, of the Madras Staff Corps, was selected as Mr. Collins' successor.

The

Chap. X.
Madras.

The following are the chief works carried on in the year:—

	Rs.
1. A coast canal for traffic from Trevandrum to Nunjahnaud, roughly estimated to cost	7,00,000
2. The thorough repair, and in fact the re-construction, of the great Southern Road from Trevandrum to Arambooly frontier, estimated to cost	63,000
3. Branch roads	25,000
4. Canal at Allepey	10,000
5. A tramway at ditto	16,000
6. Lighthouse at ditto	35,000
7. Road from Cattayam to the foot of the ghauts	23,000
8. Columns to be mounted with lights for the guidance of boats plying in the backwaters	5,000
9. Repairs of irrigation works	6,000
10. Palaces, offices, &c.	67,000

It is convenient to note the progress made up to the date of this Report.

Major Greenaway, in his Report, dated 26th May 1862, upon the southern canals, states, "I have much pleasure in being able to state that my final inspection of the A.V. M. Canal has been on the whole very satisfactory. I carefully examined the whole line of work from its southern extremity in the IV. Section."

This section may be called completed, as far as the excavation goes. There are some small irregularities in three chains near the bungalow, which, however, two, or at the utmost three days' labour will remove. With the exception of these three pits, I navigated the whole section from end to end in a boat, with only one break in the line, viz., at the Vettamudda Voykal, where a scouring dam has to be constructed.

V. Section.—Half a mile completed to full depth, and the whole section to water mark, with the exception of the rocks in the bed, of which a portion has been removed, and the blasting of the rest is in active progress. It will take four months at least to remove all these rocks. Four hundred and fifty cottahs of chunam, and a large quantity of stone, have been collected for the masonry works.

VI. Section.—Twelve thousand three hundred feet or 4,100 running yards of this canal (section) have been excavated to high-water mark, leaving 5½ feet of deepening still to be done; 200 feet more, nearly to the same depth, leaving 7 feet to be excavated. One thousand one hundred feet more are in progress, average depth of cutting 3 feet; 2,200 feet still remain to connect with the breakwater as yet untouched.

As to the state of the Southern Road, the engineer reports, after his last inspection of the same, that the progress made is very satisfactory, and that he is confident that the whole line will be completed in a very few months.

The canal, the tramway, and the lighthouse at Allepey have all been completed. The illuminating apparatus for the lighthouse arrived safely, and has been put up. It is of the catadioptric kind, of Tresnell's construction, and is probably the best light used at present in India.

The project of the Madura Road is being steadily pursued, though under difficulties and disadvantages.

Several minor works have been executed.

The total expenditure in this department in the year (1,036), inclusive of salaries, was 2,53,084 rupees.

In the eight months of this year (1,037) it has been 1,52,033 rupees.

Some important works have been planned, and will probably be undertaken.

Some of these may be particularised here:—

1. A grand Durbar hall for his Highness the Maharajah. The cost will be about 47,600 rupees.

2. A bridge over the Coolethoray river. Probable cost, 58,600 rupees.

3. A large reservoir to the north of the Nunjahnaud, to hold a good supply of water, with a view to equalise the supply for irrigation by the Parallay river. This, and the widening of the supplying channels, and the thorough repair of the existing irrigation works in the south, will probably cost 64,000 rupees.

3. A channel from the Caramaney river to supply fresh water for the Trevandrum Fort, roughly estimated to cost 1,00,000 rupees.

5. Road from Quilon to Shencottah, roughly estimated at 40,000 rupees.

6. The connexion of the Caramaney river with the canal basin at Trevandrum. Probable cost, 21,000 rupees.

7. The drainage of the tanks within the Trevandrum Fort, 4,000 rupees.

It is to be prominently remarked that, since the accession of his Highness the present Maharajah in the year under review, the operations of the Sirkar in the construction of really useful public works have greatly extended. Fully desirous as his Highness is known to be to signalise his Highness's reign by great acts of public benefit, the scale of operations is expected to rise in proportion to the resources of the State.

Military.—The Nair Brigade continues to be maintained on its usual footing. There is not much of interest to be stated under this head.

Forest.—In the year under review an assistant to the conservator of forests was entertained for the special purpose of opening out a new forest near Goodalore, and a separate establishment was allotted to him with that view.

The operations in that direction have not as yet been productive of any satisfactory results, but it is possible that such results may yet be secured.

The civil engineer has been hitherto prevented by more pressing engagements from inspecting, with the conservator, the obstructions presented by rocks in the beds of rivers and causing their removal, if practicable, with a view to the timber from valuable forests, as yet unexplored, being floated down with facility.

The working of the forests in general may be said to continue on the same footing as before.

The work done by private traders in the forests continues unabated. The subjoined is a statement of the timber fees collected from those parties by the Sirkar.

In 1035 - - - - -	12,038 rupees.
In 1036 - - - - -	12,123 „

The cardamom produce was—

In 1035 - - - - - -	84 candies.
In 1036 - - - - - -	171 „

Medical Department.—Abstract of Return of sick in the different Charity Hospitals of the Sirkar:—

Stations.	Year.	Remained.	Admitted.	Total.	Cured.	Died.	Remaining.	Comparative Amount of Sick in 1035 and 1036.	
								Increase.	Decrease.
Trevandrum - -	1036	77	1,859	1,936	1,582	190	164	1,494	–
Quilon - - -	„	12	74	86	61	17	8	43	–
Allepey - - -	„	29	116	145	92	19	34	–	2

Out-patients treated in the Trevandrum Charity Hospital - -	1,517
Ditto - at the Dispensary - - - - -	1,728
Total - - -	3,245

The maladies entailed on the suffering poor by the late famine, made numbers, in the majority of cases, resort to these institutions for relief, a circumstance which will account for the unprecedentedly large increase in the number of cases treated in those establishments. It was at such a trying period indeed that the benefits of these asylums were fully appreciated, more especially as the large number of in-patients were dieted gratuitously.

Vaccination.—The number of persons vaccinated were—

In 1035 - - - - - -	12,777
In 1036 - - - - -	12,369
	408

This difference is not striking, especially when the sufferings of the poorer classes in the latter year are considered.

Observatory.—During the year under review the director was absent on leave in Europe, but the observatory continued to do its ordinary work.

Mr. Brown, who has recently returned from Europe, reports that the observations made in the Physical Observatory have been reduced, corrected, and tabulated; that a series of magnetic observations made by him on the coast of Malabar on his voyage to Europe, was continued by him at Aden, Marseilles, Paris, London, Oxford, Edinburgh, Ardrossan, Makeestown, Lucerne, Zurich, Lausanne, Vevay, and at other stations; and that communications, respecting some of these observations, and upon other subjects, had been made by him to the Royal Societies of London and Edinburgh, and to the French Academy of Sciences, which will come under consideration in the repott for the following year.

THE MUSEUM.—The museum, with its already respectable collection of natural and manufactured objects, books, and models of steam engines and other machinery, continues to attract and to instruct native visitors.

THE PRESS.—The press continues its operations, and has been worked to increasing advantage in connexion with the public business of the country. A bi-monthly Sirkar gazette in Malayalum is published, and it promises to be a useful means of communication between the Sirkar and its subjects.

FINANCIAL.—The progress of financial improvement has been somewhat impeded at certain points in the course of a year so signally unfavourable. On the whole, however, the very fact of the ordeal of such a year having been successfully passed, may be considered to bear favourable testimony to the improved state of the finances in these three or four years.

A concise statement of receipts and disbursements for the year 1036 is given below:—

Receipts.	Sirkar Rupees.	Charges.	Sirkar Rupees.
Balance in goods, cash, &c., of last year - - - -	23,49,533	Judicial Establishments - -	81,565
Land revenue - - - -	12,43,676	Police - - - - - -	64,565
Customs - - - - -	2,71,609	Nair Troops - - - -	1,44,859
Abkarry - - - -	60,488	Elephant and Horse Establishments - - - - -	32,212
Tobacco - - - - -	13,50,732	Salaries of the Officers, &c., of the Huzoor Cutcherry and Districts	4,45,773
Pepper - - - - -	1,39,404	Palace Expenses - - -	5,41,602
Salt - - - - - -	4,11,116	Pensions - - - - -	99,759
Cardamoms and other goods -	1,92,046	Public Works - - - -	2,28,554
Timber - - - - -	1,00,976	Cost, &c., of goods sold - -	6,87,243
Miscellaneous - - - -	3,33,731	Advance for purchase of goods for the year 1037 - - - -	15,268
		Contingent charges - - -	2,35,605
		Ceremonies contingent on the death of his Highness the late Maharajah - - - -	78,995
		Repayment of the Pagoda loan -	90,000
		Pagodas - - - - - -	5,18,728
		Oottooperahs - - - -	3,37,681
		Subsidy to British Government -	8,19,834
		Items written off the Accounts -	2,18,999
		Balance in cash and goods, &c. -	*18,12,069
TOTAL - - *Rs.*	64,53,311	TOTAL - - *Rs.*	64,53,311

* About two and a half lacs of rupees of this form what is called an inefficient balance.

It may not be out of place to quote here the concluding paragraph of the Dewan's financial statement for the year under review:—

"I have thus briefly compared the financial results of a singularly adverse with those of a singularly prosperous year, and of course the gap is the more strikingly visible; but when an ordinary year is taken for comparison, when it is considered that upwards of two lacs of rupees had to be sacrificed in the land revenue of this year for the benefit of the ryots; that from reduction of taxation on tobacco and pepper, a further sacrifice was entailed on the Sirkar to a still larger amount; that most other sources of revenue were more or less influenced by the unfavourable season; that owing to the demise of his Highness the late Maharajah, extra ceremonies had to be performed which directly and indirectly caused an expenditure of about one lac; that the contingent charges had increased without any extravagance by about 73,000 rupees; when all these circumstances are considered, I ventured to think that there is ample cause to congratulate the State that it felt no financial embarrassments even under such an adverse combination of circumstances, and that it was able, while materially sacrificing revenue for the benefit of the subjects, to afford substantial relief to the distressed who crowded in thousands; to allot the unprecedentedly large sum of 2,28,000 rupees to public works, and even to liquidate a good portion (90,000 rupees) of the former year's public debt, and still to hand over a satisfactory balance for the expenses of next year."

Huzoor Cutcherry,
Trevandrum, 2d June 1862.
(signed) *T. Madava Row,*
Dewan.

(True copy.)
(signed) *W. Fisher,* Resident.

Appendix No. IX.

Madras Irrigation and Canal Company.

Abstract Statement showing the entire Expenditure of Cash and Stores under all heads, during, and up to, the end of the Official Year 1861-2.

ITEMS.	EXPENDITURE FROM 1 MAY 1861 TO 30 APRIL 1862.										Previously Expended.	Grand Total.	Add value of Articles transfered to this from other Works.	Deduct value of Articles transferred from this to other Works.	Net amount of expenditure.	Total of each main head.	REMARKS.
	Agent's Office.	Chief Engineer's Department.	Hindri Division.	Soonkasala Division.	Bowanasy Division.	Koondam Division.	Pennair Division.	Nellore Division.	Bellary Division.	Total.							
General Management.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	
Agent's Department.																	
Salaries	24,726 1 5	- -	- -	- -	- -	- -	- -	- -	- -	24,726 1 5	36,775 13 10	61,501 15 3	-	-	61,501 15 3		* This includes expenditure in Stores to 30 June 1861 only. Store accounts from 1 July 1861 not yet adjusted.
Contingent expenses	3,891 4 10	- -	- -	- -	- -	- -	- -	- -	- -	3,891 4 10	10,708 15 5	14,600 4 3	-	-	14,600 4 3		
Stores	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2,404 - 9	2,404 - 9	-	-	2,404 - 9*		
Chief Engineer's Department.																	
Salaries	- -	42,900 10 1	- -	- -	- -	- -	- -	- -	- -	42,900 10 1	57,599 11 3	1,00,500 5 4	-	-	1,00,500 5 4		
Contingent expenses	- -	2,510 14 10	- -	- -	- -	- -	- -	- -	- -	2,510 14 10	8,423 4 6	10,934 3 4	-	-	10,934 3 4		
Stores	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1,776 13 7	1,776 13 7	-	-	1,776 13 7*	1,91,717 10 6	
Construction.																	
Executive Establishment.																	
Salaries	- -	- -	36,811 6 10	3,808 4 1	25,794 2 5	21,315 - 3	17,125 - 9	2,429 4 1	4,801 5 4	1,12,084 7 9	1,36,466 12 4	2,48,551 4 1	-	-	2,48,551 4 1		
Contingent Expenses	- -	- -	2,721 2 7	240 8 3	2,317 13 4	2,044 10 -	1,076 11 2	61 11 7	123 2 3	8,585 11 2	15,238 11 2	23,824 6 4	-	-	23,824 6 4		
Stores	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	12,127 2 4	12,127 2 4	-	-	12,127 2 4*		
Work.																	
Storage	—	—	—	—	—	—	—	—	—	—	—	—	-	-	—		
Main supply	- -	2,089 14 7	2,03,911 - -	78,225 5 6	- -	- -	- -	- -	- -	2,84,226 4 1	84,889 5 3	3,69,115 9 4	-	-	3,69,115 9 4		
Distribution	—	—	—	—	—	—	—	—	—	—	—	—	-	-	—		
Buildings	- -	864 15 5	- -	1,428 4 11	- -	- -	- -	- -	- -	2,293 4 4	14,472 1 11	16,765 6 3	-	-	16,765 6 3	6,70,383 12 4	
Store Charges.																	
Salaries	2,379 9 3	1,993 14 4	1,073 6 9	120 - -	745 2 7	- -	526 9 3	373 13 5	- -	7,212 9 7	11,499 6 7	18,712 - 2	-	-	18,712 - 2		†Includes *Rs.* 2,238 4 *annas*, the value of Stores issued previous to 30 June 1861. Store accounts from 1 July 1861, not yet adjusted.
Contingent expenses	22,382 15 10	707 6 1	962 14 7	63 13 8	1,057 7 2	16 - -	109 3 6	31 8 9	- -	25,331 5 7	34,212 5 6	59,543 11 1	-	-	59,543 11 1		
Stores	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	612 10 11	612 10 11	-	-	612 10 11†	78,868 6 2	
Manufacture of Stores	- -	11,960 7 10	1,611 13 2	641 10 10	759 7 -	- -	- -	108 - -	- -	15,081 6 10	18,117 8 10	33,198 15 8	-	-	33,198 15 8	33,198 15 8	
General Plant on Works	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	7,523 3 7	7,523 3 7	-	-	7,523 3 7†	7,523 3 7	
Inefficient Balance	1,596 15 8	15,457 4 11	1,86,753 4 8	17,961 3 1	3,150 8 6	18 15 6	321 7 6	- -	- -	2,25,265 11 10	- -	2,25,265 11 10	-	-	2,25,265 11 10	2,25,265 11 10	
Steamer "Thistle"	4,839 2 8	- -	- -	- -	- -	- -	- -	- -	- -	4,839 2 8	3,488 4 7	8,327 7 3	-	-	8,327 7 3	8,327 7 3	
Total Expenditure	59,816 1 8	78,485 8 1	4,33,845 2 7	1,02,489 2 4	33,830 9 -	23,394 9 9	19,159 - 2	3,004 5 10	4,924 7 7	7,58,948 15 -	4,56,336 4 4	12,15,285 3 4	-	-	- -	12,15,285 3 4	‡ This amount includes all purchases to 30 April 1862, all issues to 30 June 1861. Store accounts from 1 July 1861, not yet adjusted.
Value of Stores in hand	80,302 11 6	75,078 11 8	20606 12 1	4,571 7 -	19,358 - 3	3,186 10 9	932 14 1	19,525 6 9	2,785 6 7	2,26,348 - 8	- -	2,26,348 - 8	-	-	- -	2,26,348 - 8‡	
Balance of Cash in hand	3,15,438 1 1	14,191 14 6	31,536 8 10	24,941 14 1	5,420 8 10	2,241 13 11	1,776 10 4	- -	- -	3,95,547 7 7	- -	3,95,547 7 7	-	-	- -	3,95,547 7 7	
Grand Total	4,55,556 14 3	1,67,756 2 3	4,85,988 7 6	1,32,002 7 5	58,609 2 1	28,823 2 5	21,868 8 7	22,529 12 7	7,709 14 2	13,80,844 7 3	4,56,336 4 4	18,37,180 11 7	-	-	- -	18,37,180 11 7	

N. B.—The amount drawn from the Government up to date	*Rs.* 18,34,560 10 8	
Miscellaneous receipts	2,620 - 11	
		18,37,180 11 7

MADRAS IRRIGATION AND CANAL COMPANY.

REPORT showing the Progress made in each Section of the WORKS Sanctioned up to the Official Year ending 30th April 1862.

General.	Number of the Work.	Particular.	Number of Miles or Work Estimated.	Number of Miles Opened or Work Finished.	Number of Miles or Works in Progress.	Number of Miles or Works yet Uncommenced.	Cost in the Official Year *i.e.*, from 1st May 1861 to 30th April 1862.	Cost Previously.	Total.	Estimated Cost.	Amount		Remarks.
											Available.	In Excess of Estimate.	
							Rs. a. p.	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*	*Rs. a. p.*
Storage -	III.	Nil.											
Main supply -	II.	Anicut and head works -	–	–	–	–	- - -	54,256 – –	54,256 – –	3,03,080 – –	2,48,824 – –	- -	Per cash account 40,742 14 6 } Under postponement.
		Kurnool Channel - -	–	–	–	–	- - -	48,597 9 6	48,597 9 6	65,000 – –	16,402 6 6	- -	Ditto - 44,146 6 9 } Under postponement.
		Anicut at Soonkasala :											
		Excavation - - -	–	–	–	–	2,057 6 9						
		Temporary dam - -	–	–	–	–	1,666 2 6						
		Cut-stone work - -	–	–	–	–	8,786 7 2						
		Rubble-stone work -	–	–	–	–	46,908 10 3						
		Embankment - - -	–	–	–	–	1,637 10 –						
		Sundries - - -	–	–	–	–	1,664 3 6	- -	62,720 8 2	1,25,000 – –	62,279 7 10	- -	Ditto - 42,550 11 6
		South Main Canal :											
		Canal excavation and embankment - - -	72 Miles.	Nil.	29 Miles.	43 Miles.	3,85,620 8 2						
		Culverts - - -	–	–	–	–	2,142 6 –						
		Bridge - - - -	–	–	–	–	1,637 8 –						
		Calingulas - - -	–	–	–	–	14,054 10 –	- -	4,03,454 – 2	17,02,330 – –	12,98,875 15 10	- -	Ditto - 2,19,824 14 3
		Hindry Aqueduct - -	–	–	–	–	32,459 9 4	- -	32,459 9 4	1,45,000 – –	1,12,540 6 8	- -	Ditto - 21,850 10 4
Distribution -	–	Nil.											
Buildings -	–	Central hospital with out-houses - - -	–	–	–	–	307 4 3	- -	307 4 3	1,230 – –	922 11 9		
		Office and workshop at Soonkasala - -	–	–	–	–	3,966 14 10	- -	3,966 14 10	4,000 – –	33 1 2	- -	Ditto - 1,428 4 11
		Kurnool Anicut office -	–	–	–	–	- - -	2,078 5 8	2,078 5 8	2,228 – –	149 10 4	- -	Ditto - 1,934 15 8
		Workshop building, Kurnool - - - -	–	–	–	–	557 11 2	3,267 1 9	3,824 12 11	- - -	- - -	- -	Under sanction, dated 24th October 1859, No. 2,500.
		Store building, &c., at Bowanassy - - -	–	–	–	–	- - -	9,270 – 6	9,270 – 6	- - -	- - -	- -	

Appendix, No. X.

Examinations for the Uncovenanted Civil Service.

The revised rules for the examination of candidates for employment in the Uncovenanted Civil Service, which were passed in April 1861, were brought into operation in the year under review. An examination of candidates according to the general test was held in February last. The number of candidates registered for this examination was 1,072, of whom 990 were examined, and 589 passed. The Commissioner's Report and the order passed on it by Government will be found in the Appendix. The Government considered the result of the examination to have been, on the whole, satisfactory. There was a marked improvement in the proportion of passed candidates to those examined, as compared with the result of the examination last held; and it was clear that the requirement of an entrance fee had, to a great extent, answered the purpose for which it was imposed, in preventing persons altogether unqualified from resorting to the examination. Another object sought in the revised rules, viz., that the Uncovenanted Service Examinations should not in any way clash with the University Examinations, has been attended with a very satisfactory measure of success. As the Commissioner observes in his report, "the number of candidates who attended the Matriculation Examination this year is more than double, while the number who passed is nearly double that of last year; and this result is, in a great part, attributable to the arrangement made for publishing the names of the University students in the order of proficiency at the head of the list of candidates qualified for employment."

The special tests, which candidates for the office of district moonsiff, or pleaders, have been hitherto required to pass, have been revised, and special tests have been prescribed for certain ministerial offices in the Judicial Department, as well as for the offices of deputy magistrate and of taluq and sub-magistrate. The rules relating to these tests, and the Commissioner's letters proposing them, will be found in the Appendix. The tests for the Revenue Department are still under consideration.

Read the following Letter from *A. J. Arbuthnot*, Esq., Commissioner for the Uncovenanted Civil Service Examinations, to the Honourable the Governor in Council, Fort Saint George; dated Madras, 27 June 1862, No. 83.

I have the honour to submit my Report on the result of the examination of candidates for employment in the Uncovenanted Civil Service, held in February last.

The examination, according to the service test, was conducted by the following gentlemen:—

Mr. H. Bowers, Mr. C. G. Master, Mr. A. Berry,	English.
Mr. D. F. Carmichael	Telugu.
The Reverend P. Percival, Mr. W. Joyes,	Tamil.
Mr. J. Garret	Canarese.
Mr. E. Thompson	Malayalum.

The examiners in each language examined the papers in arithmetic, history, and geography, written in that language.

The list of successful candidates has already been published in the "Official Gazette," under date the 13th instant. Its publication was delayed in consequence of the report of the Telugu examiner not having reached me until the 10th May, after which the completion and printing of the lists, the arrangement of which could not be commenced until all the reports had been received, caused a further delay of some weeks. I should mention that the Telugu examiner, Mr. Carmichael, finding the work considerably more than he had anticipated, or more than he could conveniently spare time for, obtained my permission to hand it over to another person; but at the last moment his nominee failed him, and he was ultimately obliged to go through the papers himself during such leisure time as he could spare from his other laborious duties. The delay is to be regretted, but under the circumstances it was unavoidable.

In accordance with the arrangement proposed in my letter of the 11th March 1861, and which has received the sanction of Government and of the Senate of the University, the list of candidates qualified for employment contains the names of the graduates and matriculated students of the University, who passed at the University Examinations in the present year. Their names are entered in two separate classes at the head of the list, the graduates in the first class, and the matriculated students in the second. It will be seen on comparing the number of matriculated students with the number who passed the Matriculation Examination in 1861, that the object which I had in view in proposing that the University Examination should be more closely and more obviously connected with the Uncovenanted Civil Service Examination, has been attended with a very satisfactory measure of success. The number of candidates who attended the Matriculation Examination this year is more than double; while the number who passed is nearly double that of last year; and it cannot be doubted that this result is in a great part attributable to the arrangement made for publishing the names of those students in the order of their proficiency at the head of the list of candidates qualified for public employment.

Number of Candidates Examined.		Number of Candidates who passed.	
1861.	1862.	1861.	1862.
79	195	48	82

It does not come within my province to enter, in this Report, into any detailed review of the University Examinations. I will therefore pass on at once to the examination conducted according to the general service test. The candidates who passed this test are registered in the third class in three subdivisions, the first containing those who are qualified for the Anglo-vernacular branch; the second, those qualified for the English branch; and the third, those qualified for the vernacular branch of the public service.

I annex a statement (Appendix) showing the number of candidates who registered their names for the examination in each district, the number who attended, and the number who passed. The following is an abstract of this statement:—

Number of Registered Candidates.				Number of Candidates Examined.				Number of Candidates who passed.			
Anglo-Vernacular Branch.	English Branch.	Vernacular Branch.	Total.	Anglo-Vernacular Branch.	English Branch.	Vernacular Branch.	Total.	Anglo-Vernacular Branch.	English Branch.	Vernacular Branch.	Total.
340	346	386	1,072	314	312	364	990	155	239	195	589

The passed candidates may further be classified as follows:—

(*a*).—As to the districts in which they were examined.

Name of District.	Number of passed Candidates.	Name of District.	Number of passed Candidates.
Ganjam	27	Salem	40
Vizagapatam	3	Tanjore	92
Godavery	11	Coimbatore	19
Kistna	9	Trichinopoly	26
Nellore	12	Madura	46
Cuddapah	7	Tinnevelly	19
Kurnool	1	North Canara	5
Bellary	15	South Canara	26
North Arcot	14	Malabar	19
Madras	173		
South Arcot	25	TOTAL	589

(*b*).—As to the agency by which they were instructed:—

Instructing Agency.	Anglo-Vernacular Branch.	English Branch.	Vernacular Branch.	Total.
Government schools	99	110	116	325
Schools receiving grants-in-aid from Government	37	48	28	113
Other schools	7	69	1	77
Private Tuition	12	10	44	66
Not stated	- -	2	6	8
TOTAL	155	239	195	589

(*c*).—As to race:—

Race of passed Candidates.	Anglo-Vernacular Branch.	English Branch.	Vernacular Branch.	Total.
Europeans or Eurasians	5	41	5	51
Hindus	148	188	189	525
Mahomedans	2	10	1	13
TOTAL	155	239	195	589

Dictation - - - -	½ marks.
Correction of mis-spelt passage	¾ "
Arithmetic - - - -	¼ "

No candidate has been passed who did not obtain one-third of the aggregate maximum number of marks assigned to the subjects in which he was examined; and in each of the subjects noted in the margin, a minimum was prescribed.

The following is a precis of the main points noticed in the reports of the examiners:—

English.

The examiners draw attention to the success of the Madura candidates, 45 of whom passed in English out of 53 examined; 28 of those who passed obtaining more than half-marks. At Masulipatam, the Reverend Mr. Noble's pupils have, as usual, distinguished themselves, not only by their general success, but by the neatness and accuracy of their work. Out of nine candidates there was not a single failure, and two-thirds got more than half-marks. The candidates at Bellary, Salem, and Nellore, have done fairly. The whole of the Bellary papers were very neatly worked, and the spelling was considerably above the average. The Combaconum papers were all good as far as they went. Several candidates, however, did not answer more than two or three of the questions in some of the papers; and mainly for this reason 13 out of 32 failed. Nearly all who passed did very well.

At Mangalore, the papers generally showed want of care in execution. The arithmetic here was inferior to the spelling. At Honore, the papers of the four candidates, all of whom passed, were very creditable. At Rajahmundry and Coimbatore, the spelling was particularly good, and the grammar papers were well done.

The Chittoor papers showed a deficiency in arithmetic, and the answers in grammar were generally indifferent. At Tanjore and Tranquebar, the papers were badly done, and were below the average in arithmetic.

At Madras, 165 out of 247 candidates passed. The result was not more than might be reasonably expected, considering the educational resources of the Presidency town, and the low standard of the examination.

Telugu.

The examiner in Telugu draws attention to the very general failure in spelling, and especially in the correction of a mis-spelt passage, which branch of the test, he observes, has not been introduced before it was wanted. The arithmetic was generally good. The Cuddapah papers were uniformly good; next to these come those from Ganjam. Some superior candidates went up to Bellary, Masulipatam, and Nellore. At Rajahmundry, all failed but one; and of the candidates from Vizagapatam, Chittoor, the Presidency town and South Canara, not one passed.

Tamil.

The hand-writing was generally indifferent, and in arithmetic many failed.

Canarese.

The answers in arithmetic were below the average. In the other subjects, the Canarese students did fairly.

Malayalum.

The Malayalum candidates did fairly in language, but indifferently in arithmetic.

The examiners in English recommend that the minimum in dictation should be raised; and Mr. Carmichael makes a similar recommendation in regard to the arithmetic. I concur in both these suggestions, and propose to raise the minimum in dictation to three-fourths, and that in arithmetic to one-third.

I consider that the result of this examination has been, on the whole, satisfactory. Every precaution appears to have been taken to prevent any copying or other unfair practices, and from the reports which I have received, I find that only three candidates are suspected of having resorted to such practices. These candidates, who were all examined at Trichinopoly, have been rejected, and have been informed of the cause. The number of passed candidates is quite sufficient to meet the requirements of the service, and in the proportion of those who passed to those who failed, there is a considerable improvement. The standard of the service test is certainly a low one; but it is as much as can at present be demanded for admission to the lower offices in the public service, and it is sufficient to ensure that those who pass it have, at all events, mastered the first rudiments of learning. Low as the standard is, there is of course a considerable difference between those who pass at the head, and those who pass at the bottom of the list; and here, I take it, is the great advantage of this system of examinations for the public service, that, while it does not unduly fetter the discretion of heads of offices, it furnishes them with the means of selecting fairly educated young men, and renders them, in a great measure, independent of the recommendations made to them by their official subordinates, which have often exercised so mischievous an influence in our courts and cutcherries.

I have the honour to request, in conclusion, that the civil paymaster may be instructed to pass the following charges incurred in connexion with the examination:—

Stipends to Examiners.

	Rs.	*Rs.*	*a.*	*p.*
Examiners in English.				
Mr. H. Bowers - - - - - - -	800			
Mr. C. G. Master - - - - - -	800			
Mr. A. Berry - - - - - - -	800			
Examiners in Tamil.				
The Reverend P. Percival - - - - -	700			
Mr. W. Joyes - - - - - - -	700			
Examiner in Telugu.				
Mr. D. F. Carmichael - - - - -	700			
Examiner in Canarese.				
Mr. J. Garrett - - - - - - -	250			
Examiner in Malayalum.				
Mr. E. Thompson - - - - - -	250			
		5,000	-	-
Stipends to unofficial persons employed to superintend the examination:				
Reverend S. Percival, Tanjore - - -	50			
Reverend J. F. Spencer, Cuddapah - -	50			
		100	-	-
Stipends to persons employed to assist me in conducting the correspondence during the past year, and preparing the lists:				
Mr. D. White, Acting Uncovenanted Assistant to the Director of Public Instruction - - - - - - - -	150			
Mr. J. H. Aubert, Manager of the Office of the Director of Public Instruction - - -	100			
		250	-	-
Contingencies, including printing and other charges		482	10	3
		5,832	10	3
Deduct amount already passed for contingencies -		422	3	9
Net sum now to be passed by the Civil Paymaster -		5,410	6	6

These charges having been all incurred during the official year 1861-62, should be debited to the Budget Estimate for that year. The fees paid by the candidates, which have been carried to the credit of Government, after deducting refunds made to a few candidates who, having passed at previous examinations, came up only in the language with the view of qualifying for the Anglo-vernacular branch of the service; or who, after having registered their names, were prevented by circumstances beyond their control from attending the examination, amounted to 3,353 rupees, reducing the actual cost of the examination and of the commission for the entire year to *Rs.* 2,057. 6. 6.

STATEMENT showing the NUMBER of CANDIDATES who registered their Names for Examination in each DISTRICT, the Number who attended, and the Number who passed.

DISTRICTS.	Number of Registered Candidates.				Number of Candidates Examined.				Number of Candidates who Passed.			
	Anglo-Vernacular Department.	English Department.	Vernacular Department.	TOTAL.	Anglo-Vernacular Department.	English Department.	Vernacular Department.	TOTAL.	Anglo-Vernacular Department.	English Department.	Vernacular Department.	TOTAL.
Ganjam - - -	8	6	22	36	7	6	20	33	5	6	16	27
Vizagapatam - -	2	3	4	9	1	2	2	5	1	2	–	3
Godavery - - -	11	6	2	19	10	6	2	18	2	9	–	11
Kistna - - - -	7	2	2	11	7	2	1	10	3	6	–	9
Nellore - - -	9	8	15	32	9	5	13	27	4	5	3	12
Cuddapah - - -	4	1	4	9	4	1	4	9	2	1	4	7
Kurnool - - -	2	1	2	5	2	1	2	5	–	1	–	1
Bellary - - -	9	13	7	29	9	10	7	26	4	10	1	15
North Arcot - -	20	6	13	39	19	5	12	36	3	6	5	14
Madras - - -	53	230	16	299	38	217	16	271	16	152	5	173
South Arcot - -	23	6	26	55	22	6	23	51	8	3	14	25
Salem - - - -	29	9	27	65	29	9	27	65	18	5	17	40
Tanjore - - -	60	11	105	176	59	5	105	169	26	7	59	92
Coimbatore - - -	3	25	5	33	3	20	3	26	2	15	2	19
Trichinopoly - -	19	4	30	53	18	4	30	52	8	3	15	26
Madura - - -	48	5	22	75	44	5	22	71	33	3	10	46
Tinnevelly - - -	8	2	18	28	8	2	17	27	7	1	11	19
North Canara - -	5	–	1	6	5	–	1	6	4	1	–	5
South Canara - -	18	6	26	50	18	4	26	48	9	3	14	26
Malabar - - -	2	2	39	43	2	2	31	35	1	1	17	19
TOTAL - - -	340	346	386	1,072	314	312	364	990	156	239	194	589

Note.—In some cases the number passed in a particular district, and for a particular branch, exceeds the number of candidates entered as having been examined. This is caused by some candidates who came up for the Anglo-vernacular branch, having passed either for the English branch or vernacular branch only.

(signed) *A. J. Arbuthnot,*
Commissioner for the Uncovenanted
Civil Service Examinations.

ORDER THEREON, 7 July 1862, No. 221.

THE Governor in Council concurs with the Commissioner for the Uncovenanted Civil Service Examinations, in considering the Examination, held in February last, to have been on the whole satisfactory. The number of candidates who passed the University Matriculation Examination was nearly double that of last year, and in the proportion of candidates who passed (according to the service test) to those who failed, there is a marked improvement, as compared with previous years. On reference to the Proceedings of Government of the 24th April 1861, it appears that the candidates passed at the last Examination, which was held in the month of November of the previous year, was only 16 per cent. of the number originally examined. On the present occasion, the per-centage of passed candidates to those registered for the Examination is very nearly 55, and to those actually examined it is over 58.

2. The Governor in Council resolves to call the attention of the Director of Public Instruction, and of the Inspector of Schools in the First and Second Divisions, to the very small number of candidates who presented themselves for examination in the districts of Vizagapatum, Godavery, Kistna, Cuddapah, and Kurnool. In the three first-named districts, and especially in the Godavery, the number of schools which have been in operation for some years past is, it would appear, quite sufficient to supply a much larger number of candidates. The Director will communicate on the subject with the Inspectors and with the Collectors of the districts referred to, and will state to what cause he attributes the paucity of candidates in these as compared with other districts.

3. Looking to the Presidency generally, the Government see no reason to question the expediency of the regulation under which the payment of a small fee of *Rs.* 3. 8. has been required from all candidates presenting themselves for examination. It has had the desired effect of considerably reducing the proportion of unqualified candidates, and, on the whole, the number of passed candidates, which, including those entered in the University lists, amounts to 677, is quite sufficient to meet the requirements of the public service; candidates for offices of 25 rupees per mensem and under not being required at present to pass any preliminary test. In regard to the districts which have been noticed in the preceding paragraph, the Governor in Council sees no good reason for supposing that the small number of candidates who have attended the examination in those districts is to be attributed to the entrance fee. The districts of Cuddapah, Godavery, and Kistna are not less wealthy than those of Salem and Madura, nor is there any marked difference in this

respect between the two adjoining districts of Ganjam and Vizagapatam. These remarks will be communicated to the Right Honourable the Secretary of State, with reference to his Despatch of the 16th July 1861, No. 32, para. 2.

4. The Governor in Council sanctions the charges specified in the 13th para. of the Commissioner's letter. They will be passed by the Civil Paymaster, and debited to the budget estimate for 1861-62.

(No. 55.)

From *A. J. Arbuthnot*, Esq., Commissioner for the Uncovenanted Civil Service Examinations, to the Chief Secretary to Government, Fort Saint George.

Sir, Madras, 17 January 1862.

I HAVE the honour to acknowledge the receipt of the proceedings of Government in the Judicial Department under date the 11th ultimo, No. 1521, calling for my remarks on a letter from the Registrar of the Sudder Court regarding the special test of qualification to be demanded from candidates for employment as pleaders and district munsiffs, and the course to be taken with reference to the cases of several district munsiffs who are now holding their appointments conditionally on their passing an examination.

The Code of Civil Procedure.
The Rules of Practice. Civil.
"Strange's Manual of Hindu Law."
"Sadagopah Charlu's Manual of Mahomedan Law."

2. In this letter the judges of the Sudder Court point out that, previous to the passing of the Uncovenanted Service Examination Rules of 1858, candidates for pleaderships and munsiffships were subjected to a special examination of a comparatively elementary character, and that this examination was superseded by the test prescribed in 1858, which has since been abolished, and which in consequence of its requirements, including a knowledge of the English language, has been passed by few or none of those persons who have been appointed to district munsiffships since it was introduced. The judges propose to dispense with any special examination in the case of such of the officers now holding their appointments conditionally, as may be considered by the Zillah judges, in whose jurisdictions they are serving, to have given practical proof of their efficiency; and in regard to future candidates, they recommend that persons who entered the public service before 1855, should be promoted to the office of district munsiff on passing an examination in the subjects noted in the margin, on all of which vernacular treatises are now available; and that a somewhat more complete test, including the Law of Evidence, Criminal Law and Procedure, and the Law of Contracts and Torts, should be applied as soon as the requisite text books in the vernacular languages are prepared.

3. Under the circumstances, it appears to me to be desirable that such of the officiating district munsiffs, as may be considered by the Zillah judges to have given practical evidence of their fitness for their duties, should be at once confirmed in their appointments without examination. For reasons which I will state presently, it does not seem advisable to hold a special judicial examination during the present year, and it would not be fair to keep men who have done their work well, in suspense for so long a period. The same course, I think, should be taken in regard to any pleaders who may be in a similar position :—

4. For future candidates I would propose the following rules :—

1st. That persons now in the public service, and who entered it before the 1st January 1859, and who from ignorance of English may be unable to pass an examination conducted through the medium of that language, shall be declared eligible for the office of pleader, or munsiff, on passing an examination conducted through the medium of the vernacular languages in the following subjects :—

1st.—The Law of Evidence (as contained in "Kindersley's Manual").
2d.—The Codes of Civil and Criminal Procedure, with the Rules of Practice.
3d.—The Penal Code.
4th—Hindu Law (as contained in "Strange's Manual").
5th.—Mahomedan Law (as contained in "Sadagopah Charlu's Manual").

2d. That persons who had not entered the public service on the 1st January 1859, or who desire to pass their examination in the English language, shall be declared eligible for the offices in question, either on obtaining a degree of law in the University of Madras, or in any other Indian University, or on passing an examination under the direction of the Commissioner for the Uncovenanted Civil Service Examinations in the following subjects :—

1st.—The Law of Evidence.—Norton.
2d.—The Code of Civil and Criminal Procedure, with the Rules of Practice.
3d.—The Penal Code, as illustrated by Mayne.
4th.—The Law of Contracts, as contained in "Sawyer's Manual."
5th.—The Law of Torts and the measure of damages, as contained in "Broom's Commentaries on the Common Law," pages 628 to 863—Edition 1856.
6th.—Hindu Law, as contained in "Strange's Manual," and the 1st volume of "Strange's Hindu Law."
7th.—Mahomedan Law, as contained in "Sadagopah Charlu's Manual."

5. I name

5. I name the 1st January 1859 as the date, which, in the case of public *employés*, is to determine which of the two standards they shall be required to pass; on the ground that all who have entered the public service since that date had notice that in order to qualify for any of the offices under consideration, they must pass an examination fully equal to the higher of the two now proposed, and that such examination would be conducted through the medium of the English language. I would also require Europeans, East Indians, or Natives, who may prefer to answer the questions in English, to pass according to the second of the two tests above proposed. For such persons the requisite text books are, and for some time past have been, available, and it is not too much to require that they should pass the higher test. I would rank the two classes of candidates in two separate grades, thereby giving an advantage to those who pass the higher test, and I would place in a still higher class the University graduates in Law, declaring them eligible, as far as a special judicial examination is concerned, for any appointment in the Judicial Department to which officers of the Uncovenanted Civil Service can be appointed under the existing law. The qualifications to be demanded from pleaders or advocates in the High Court will have to be determined when that court shall be constituted.

6. I would recommend that the first examination to be held under these Rules be postponed to February 1863, in order that time may be given for the preparation of vernacular translations of "Kindersley's Manual of the Law of Evidence." If immediate arrangements be made for procuring translations of this work, they may be executed and published in two or three months, in which case candidates will have sufficient time to study the work before the examination takes place. This course, it appears to me, is preferable to holding an examination at an earlier date, omitting the Law of Evidence, which is in point of fact the most essential branch of legal knowledge.

7. In the list of text books for the higher standard of examination, I have substituted Mr. Norton's for Mr. Kindersley's work. It is more full, but not on that account, I think, more difficult. It was the work named under the former rules, and has been adopted for the judicial examinations in Bengal, as also, I believe, in Bombay.

8. I would only remark in conclusion that it appears to me of great importance that every effort should be made to secure a knowledge of the English language on the part of candidates for employment as district munsiffs, or as pleaders in the courts. As a general rule, the attainments to be demanded from a munsiff should be such as to qualify him for the higher office of Principal Sudder Ameen. The latter office is now, I believe, practically restricted to persons acquainted with English; and it seems desirable that this qualification should be possessed by as many as possible of the class of judicial officers from which the Principal Sudder Ameens are selected. This object will, I think, be attained by the rules now proposed. The privilege of being placed in a higher class of passed candidates will operate as an incentive to passing according to what I may term the English standard of judicial examination, and at the same time deserving public servants who have not had the means of qualifying for this standard, will not be altogether debarred from promotion.

9. Drafts of a Notification containing the rules now proposed, and of an advertisement regarding translations of "Mr. Kindersley's Manual of the Law of Evidence," are annexed.

NOTIFICATION.

It is hereby notified that candidates for employment as district munsiffs or pleaders, not being graduates of the Madras University, or another Indian University in the faculty of law, and who had not been employed in the public service on or before the 1st January 1859, shall in future be required to pass an examination in the following subjects:—

(*a.*) The Law of Evidence, as contained in Mr. Norton's work.

(*b.*) The Codes of Civil and Criminal Procedure, and the Rules of Practice.

(*c.*) The Indian Penal Code, as illustrated by Mayne.

(*d.*) The Law of Contracts, as contained in "Sawyer's Manual."

(*e.*) The Law of Torts and the Measure of Damages, as contained in "Broom's Commentaries on the Common Law"—pages 628 to 863, Edition 1856.

(*f.*) Hindu Law, as contained in "Strange's Manual," and the 1st Volume of "Strange's Hindu Law."

(*g.*) Mahomedan Law, as contained in "Sadagopah Charlu's Manual."

2. Persons now in the public service, and who may have been so employed consecutively since the 1st January 1859, will be eligible for the appointment of district munsiff or pleader on passing an examination in the following subjects, which will be conducted through the medium of the vernacular languages.

(*a.*) The Law of Evidence as contained in "Kindersley's Manual."

(*b.*) The Codes of Civil and Criminal Procedure, and the Rules of Practice.

(*c.*) The Indian Penal Code.

(*d.*) Hindu Law as contained in " Strange's Manual."

(*e.*) Mahomedan Law as contained in " Sadagopah Charlu's Manual."

3. Candidates desiring to be examined through the medium of the English language will be required to pass, according to the standard laid down in the 1st paragraph of this Notification.

4. The examination provided for in these rules will be held annually in the month of February, commencing in February 1863; and at the close of each examination, the candidates who pass will be ranked in four classes in the order of proficiency, as follows:—

1st. Masters of Law of the Madras or other Indian University.

2d. Bachelors of Law of the Madras or other Indian University.

3d. Passed candidates, according to the standard laid down in the 1st paragraph of this Notification.

4th. Passed candidates, according to the standard laid down in the 2d paragraph of this Notification.

5. Every candidate for the office of pleader or district munsiff, who had not been employed in the public service on or before the 1st January 1859, will be required to have passed one or other of the following tests in the vernacular language of the district in which he seeks employment.

Either (*a*) the University Matriculation test, or (*b*) the test of language laid down in Section I., of the rules for the Uncovenanted Civil Service Examinations, under date the 26th April 1861.

6. Other candidates will be required to have passed one or other of these last-mentioned examinations, only in the event of their seeking employment in a district, the language of which is not their vernacular.

7. The following special tests are prescribed for the undermentioned subordinate offices in the Judicial Department:—

For the office of Sheristadar in the Sudder Court, and in the Courts of Civil and Session Judges, and of Subordinate Judges and Principal Sudder Ameens.	The Code of Civil and Criminal Procedure, Rules of Practice, Civil. The Stamp and Limitation Acts, and the system of Judicial Accounts.	*N. B.*—The Examination shall be conducted in English.
For the office of Translator in the Sudder Court.	The Code of Civil Procedure. Translating from two of the vernacular languages of this Presidency into English, and *vice versâ.*	
For the office of Foujdaree Translator in the Session Courts.	Translating from the vernacular language of the District into English, and *vice versâ.*	
For the offices of Manager, Record keeper, Examiner of Correspondence, and Clerk in the Sudder Court, on salaries of 50 rupees and upwards.	The Codes of Civil and Criminal Procedure, and Rules of Practice.	

8. The examinations according to these tests will also be held annually in the month of February, commencing in February 1863; and from and after the 1st May 1863, no person shall be appointed to any of the offices named in the preceding paragraph who has not passed the special test prescribed.

ADVERTISEMENT.

Translation of " Kindersley's Manual of the Law of Evidence " in the four principal vernacular languages of this Presidency, viz., Telugu, Tamil, Canarese and Malayalam, being required, the Chief Secretary to Government will be prepared to receive tenders up to the 15th proximo from persons competent to prepare such translations, stating for what sum and within what period they will engage to execute and publish translations of the work in question.

2. The number of copies of each translation that will be required is as follows:—

Telugu - - - - - - - -	500
Tamil - - - - - - - -	500
Canarese - - - - - - - -	300
Malayalam - - - - - - -	300

3. The tenders should be prepared in the following form, and headed—

"Tenders for the publication of Translations of 'Kindersley's Manual of the Law of Evidence.'"

Name of Persons Tendering.	Language in which he is Prepared to Execute a Translation.	Sum for which he engages to Execute and Publish the Translation.	Date on which he Engages that the Translation shall be Published.	Price per Copy at which he Engages to Sell the Work.	Remarks.

Each tender should be accompanied by certificates of qualification.

Read the following Letter from *R. J. Arbuthnot*, Esq., Commissioner for the Uncovenanted Civil Service Examination, to His Excellency the Governer in Council, Fort St. George; dated 28th May 1862, No. 81.

In acknowledging the receipt of the proceedings of Government in the Judicial Department, under date the 17th ultimo, No. 620, directing me to prepare a notification regarding the special tests which candidates for the office of sub-magistrate are to be required to pass, I have the honour to submit a notification prescribing a special test for candidates for the office in question, as well as candidates for the offices of deputy magistrate and of taluq magistrate.

2. In this notification I have adopted the principle which has been approved and sanctioned by Government in the case of district moonsiffs and pleaders, viz., that candidates who entered the public service since the 1st January 1859, shall be required to pass the test through the medium of the English language, the law of evidence in their case being included in the test, and that other candidates shall be at liberty to pass the test through the medium of a vernacular language, the law of evidence being omitted in the latter case until vernacular works on that subject shall be available.

3. I have deemed it advisable to apply these tests to candidates for the office of deputy and taluq magistrate as well as to candidates for the office of sub-magistrate, as a special judicial test is as requisite, indeed more requisite in the one case than in the other; and if I am not mistaken, it is to officers of this class and taluq magistrates (Tahsildars) that the Sudder Court more especially refer in their proceedings of the 21st March last.

4. I have now under consideration the question of special tests for the Revenue Department, which most of the officers referred to in the notification now submitted will have to pass; but as the duties are separate, there is no apparent necessity for including the two sets of tests in a single notification.

JUDICIAL DEPARTMENT.

Notification.—Fort St. George, 30th May 1862.

It is hereby notified that candidates for the offices of deputy magistrate, taluq magistrate, and sub-magistrate, not being graduates of the Madras University or any other Indian University in the faculty of law, and who had not been employed in the public service on or before the 1st January 1859, shall in future be required to pass an examination in the following subjects:—

(*a.*) The Law of Evidence, as contained in Mr. Norton's work.
(*b.*) The Code of Criminal Procedure and Rules of Practice, as laid down by the Court of Foujdaree Udalut.
(*c.*) The Indian Penal Code, as illustrated by Mr. Mayne.

The examination will be conducted through the medium of the English language.

2. Persons now in the public service, and who may have been so employed consecutively since the 1st January 1859, will be eligible for any of the offices above named on passing an examination in the following subjects, which will be conducted through the medium of the vernacular language.

(*a.*) The Code of Criminal Procedure and Rules of Practice, as laid down by the Court of Foujdaree Udalut.
(*b.*) The Indian Penal Code.

N.B.—As soon as any suitable work on evidence may be published in the vernacular languages of this Presidency, the Law of Evidence will be added to this test.

3. Every candidate for the office of deputy magistrate, taluq magistrate, or sub-magistrate, who had not been employed in the public service on or before the 1st January 1859, will be required to have passed one or other of the following tests in the vernacular language of the district in which he seeks employment.

Either (*a*) the University Matriculation test, or (*b*) the test in language laid down in Section I. of the Rules for the Uncovenanted Civil Service Examinations, under date the 26th April 1861.

4. Other candidates will be required to have passed one or other of these last-mentioned examinations only in the event of their seeking employment in a district, the language of which is not their vernacular.

5. The examinations according to these tests will be held annually in the month of February, commencing in February 1863. After the 1st May 1863, no person shall be appointed to any of the offices named in the preceding paragraph who has not passed the special test prescribed.

ORDER thereon, 30th May 1862, No. 869.

The Governor in Council approves of the notification submitted with the foregoing letter, and directs its publication in the Fort St. George and district gazettes.

ORDER thereon, 24th June 1862, No. 197.

IN the first of the letters above recorded, the President of the Committee, appointed on the 24th April 1860 to inquire into and report on the working of the School of Industrial Arts, has submitted the result of their inquiries on the various points which were referred for their consideration.

Report of the Committee, dated 23d October 1861.

2. The conclusion at which the Committee have arrived is that the school should be continued, a few alterations being made in its working which they consider calculated to promote its efficiency. In regard to the Industrial Department, in which the instruction has latterly been confined to brick and tile making, and pottery in its various branches, they observe that in those arts abundant evidence was forthcoming to show that there was an urgent need of improvement, and that the interests of Government and the community suffered by the badness of the building materials prepared in the native methods. The Committee were satisfied from the result of their inquiries that " the School of Arts has effected great improvement in this important respect, and may be expected to produce still greater good as its operations take decided hold on the native community. It is to be recollected that in this country a School of Arts has not merely to direct and guide, it has to elevate and almost create the particular branch of industry now under discussion, and a single institution of very moderate size can but proceed slowly in exerting an extensive influence in so great an area as that in which the Madras School of Arts is placed."

3. The Committee draw special attention to the pottery established by Arnachellum Moodelly at Chindadripetta, and to the brick and tile manufactory undertaken by Mr. Midford on the Poonamalee-road, both with the help of machinery and persons supplied from the School of Arts. They also advert to the opinion of the civil architect and of Mr. Wright, the locomotive superintendent in the Madras Railway, both of whom are greatly interested in the improvement of building materials, and both of whom attribute good results to the School of Arts, and advocate its continuance. They further allude to the fact of five classes from the engineering college, consisting of 61 advanced pupils having attended the school for instructions in brick and tile making and the manipulation of clays with such advantage, that the principal preferred a continuance of this course to forming a class for the purpose on the college premises, and to the favourable reports which were made on the building materials exhibited by the school at the last Madras Exhibition. They conclude their remarks on this point by observing that "if the evidence regarding the results of the school had been less favourable, they would not have been able to propose the abolition of such an institution without much hesitation and regret. It forms the only Government school for the encouragement of Arts in this Presidency, and in the Committee's opinion a portion of the public revenue may well be appropriated to this branch of Native education, although direct and extensive benefit may be slow to appear. The Committee entirely concur in the following remarks of the Government, recorded in Extract Minutes of Consultation, 24th April 1852, No. 571, 'whether the institution be regarded as a means of diffusing science and imparting a taste for the requirements and amenities of life among the people of this part of India, or of affording them scope for the exercise of their talents to the improvement of their condition in life, or of development of the great resources of the country, mineral and vegetable, and the other valuable productions which are now known to exist in the Madras territory, it deserves the patronage and pecuniary support of the State.' It may be added that this school was long the only one in all India, and that the institutions of a similar character which have lately been established in Calcutta, Bangalore, Murree in the North West Provinces, and Upper Assam, have been aided by it, as is shown in Appendix (A)."

4. Having

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4. Having given their opinion in favour of maintaining the institution, the Committee proceed to state what should be done to improve its usefulness. Keeping in view the two principles advocated by the Director of Public Instruction, in his letter of the 29th June 1857, that the school should be a place of instruction rather than of manufacture, and that the two departments should be brought into as close a connexion as practicable, they make the following recommendations:—

1st.—That the attention of the students in the Artistic Department after they have gone through a preparatory course of instruction in geometrical drawing and free hand simple sketching, should be confined to one branch of drawing, viz., either machine, or architectural, or botanical drawing.

2d.—That instruction in machine and plan drawing should be given very sparingly.

3d.—That certificates should be granted to the pupils who qualify themselves either as wood or copper-plate engravers or as draughtsmen.

4th.—That prizes and prize scholarships should be given to induce art students to prolong their stay in the school.

5th.—That the fee in the Artistic Department should be raised.

6th.—That in the Industrial Department, with the view of confining the institution to its legitimate object as a school of instruction, no orders to manufacture should be received, that it should be left to the trained pupils to take up such orders or to manufacture on their own account for sale to the public, and that articles manufactured at the school during the process of tuition should be disposed of by occasional auctions.

7th.—That the expenditure on superintendence and labour in the Industrial Department should be confined to that portion of the Government allowance which has been hitherto reserved for this department, viz., 400 rupees per mensem, all sale proceeds being applied to the purchase of firewood and raw materials, by which arrangement the Committee anticipate that an opening will be made for a superior class of Natives and East Indians to resort to the school for the purpose of learning (and learning only) the various processes of manufacture exhibited in it, and qualifying themselves for employment on large works as superintendents, or setting up business on their own account as manufacturers.

8th.—That two Chinamen be procured to aid the superintendent in introducing improvements into the process of glazing, on salaries of 35 or 40 rupees per mensem.

9th.—That a European thoroughly acquainted with pottery business be employed in the school.

10th.—That a brief report of the operations of the school be published annually, and distributed throughout the three Presidencies.

11th.—That a museum be established in connexion with the Industrial Department for the collection of models of useful machinery, tools, &c.

12th.—That the arrangement in force while the late Mr. Cole held the office of Professor of Fine Arts, of having two officers, one in charge of the Artistic Department, and the other of the Industrial Department; the latter exercising a general control over the whole institution, be reverted to whenever arrangements can be made for procuring two such officers from England, and in the meantime Dr. Hunter should be retained at the head of both departments on a salary of 1,000 rupees per mensem.

5. The Director of Public Instruction and Dr. Hunter, whom the Director has consulted on the several points noticed in the Committee's Report, approve generally of the foregoing recommendations. The only material question upon which there is any difference of opinion is that of receiving orders for manufacturing in the Industrial Department, which Dr. Hunter considers—and in the opinion of the Government on valid grounds—must be continued to a certain extent. The principle that the business of the school is to furnish the means of instruction, should, of course, be kept constantly in view; but to this end, and in order that the practical utility of the instructions may be adequately tested, the Governor in Council thinks with Doctor Hunter that the practice of receiving and executing orders cannot be discontinued to the extent proposed by the Committee.

6. The Acting Director of Public Instruction will determine in communication with Dr. Hunter what fee shall be charged in the Artistic Department, keeping in view the suggestions made in paragraphs 2 and 4 of Mr. Arbuthnot's letter of the 1st ultimo. The establishment of the scholarships proposed in paragraph 3 of the same letter is sanctioned. Dr. Hunter will take such steps as he may think proper to procure two Chinamen to teach glazing, and a European superintendent for the pottery business. The salaries of these persons will be defrayed from the Government allowance. The passage money of the Chinamen is not to exceed 300 rupees for each. Provision for this charge has been made in the budget estimate for the current year.

7. Dr. Hunter suggests that an application should be made to the Board of Trade for models of useful machinery, tools, &c., and also to the Commissioners of the London Exhibition for a share of such raw products, models, or works of Art as may be available for distribution at the close of the Exhibition. The Governor in Council doubts the utility of supplying the school with models unless they are working models. There are probably in the stores of the Public Works Department and in the Arsenal machines and implements, the uses of which might be taught in the school, and which could be placed at Dr. Hunter's disposal for this purpose, either temporarily or permanently, if required. In the latter case they would have to be purchased out of the school funds. Dr. Hunter will be able to ascertain from the Chief Engineer and Inspector General of Ordnance whether this suggestion can be carried out. His proposal that an application should be made to the Commissioners of the London Exhibition for such aid as it may be in their power to render to the school at the close of the Exhibition, will be brought to the notice of the Secretary of State.

8. His Excellency the Governor in Council has already acted on the suggestion made in the 32d paragraph of the Committee's Report, that for the present Dr. Hunter should be retained at the head of both departments of the school on a salary of 1,000 rupees per mensem. This arrangement is now under the consideration of the Home Government, having been referred by the Government of India for the orders of the Secretary of State. The Governor in Council is of opinion that it should be continued so long as Dr. Hunter's services may continue to be available, feeling assured that the institution, which is entirely his own creation, cannot be left in better hands.

Order of Government on the Rate Schools in Godavery and other Districts, 7 June 1862, No. 178.

The establishment of these schools was commenced with the sanction of Government in March 1855 by Mr. G. N. Taylor, then sub-collector of the district, and was continued by his successors in the sub-collectorate up to 1859, since which year it is believed no new schools have been opened. According to the latest returns, the number of schools was 100, with an attendance of 2,000 pupils. The schools have been supported almost entirely by a rate paid by the agricultural classes in the form of a per-centage on the land tax. The original scheme provided that such persons not paying any land tax as might send their children to the schools, should pay a schooling fee, but the sums raised from this source have, it is understood, been inconsiderable, and the main burden of supporting the schools has fallen on the agricultural community. The imposition of the rate originated in applications which Mr. Taylor, writing in August 1854, reported that he had received from the inhabitants of certain villages offering to assess themselves for the purpose of supporting primary vernacular schools in their villages; and it was sanctioned on the understanding that the proposal in each case should emanate from the village itself, and that the amount to be levied "should be fixed by the inhabitants, who in a body should be required to signify their assent to the arrangement."

In a report made by Mr. Taylor, the year after the scheme was sanctioned, he stated that "in every instance in which a school had been established, the inhabitants had cheerfully offered to support," "that every precaution had been taken to ascertain their real wishes in the matter," and that he had "declined to open a school wherever there was the least hesitation or difference of opinion on the part of the community." "Discontented spirits," he observed, "will always be found, and, as might have been expected, there have been a few complaints from the disaffected, and appeals both to myself and to higher authority, which have received immediate attention, but have usually ended in the objector's consenting with the majority that the schools should stand."

The voluntary character of the rate has of late been questioned, and from the result of an inquiry which has been instituted by Captain Macdonald, the inspector of schools for the 1st division, it appears that in some of the villages the ryots now refuse to pay the rate, while in others they pay it unwillingly, but that in most of the villages it is collected without difficulty, and that in many the people would be averse to its abolition. Captain Macdonald, however, anticipates that when the revised land assessment, which will considerably increase the land tax, comes into operation "the opposition to the present educational cess will be much more serious than it has hitherto been, and that it will extend even to those villages in which the subscriptions have been hitherto collected without any difficulty." The collector concurs in this opinion.

In the course of the correspondence which had taken place regarding these schools a question has been raised as to the authority of the sub-collector to enforce payment of the rate. Mr. Taylor considered that the rate once agreed to became a fixed permanent addition to the village demand; but it appears that none of his successors in the sub-collectorate have acted on this theory, and the Board of Revenue are clearly of opinion that no such power could be legally enforced.

It was necessary under these circumstances that in order to maintain the schools some change should be made in the plan originally sanctioned for providing the necessary funds. On full consideration the director of public instruction came to the conclusion that one of three courses must be taken—

(*a.*) Either to devise some modification of the present system which might be free from the objections urged against the latter by the Board of Revenue.

(*b.*) Or to constitute the schools Government schools, and defray their cost out of the general revenues, requiring each pupil to pay a schooling fee, as in the other Government schools.

(*c.*) Or, lastly, to arrange for the schools being maintained on the grant-in-aid plan, the Government and the village communities dividing the cost between them.

Mr. Arbuthnot considered that there was a grave and indeed insuperable objection to the adoption of the second of these three plans, on the ground that it is not desirable or indeed possible that the Government should undertake to provide from the public Treasury for the instruction of the whole rural population, and that there was no valid reason for doing in the sub-division of the Rajahmundry district what cannot be attempted elsewhere. He was also of opinion that the grant-in aid plan, unless supplemented by some legislative provision, which would ensure the permanency of the local funds, could not be applied to schools of the character of those under consideration with any prospect of permanent success. Rejecting both these measures as being either unsuitable or inadequate to the attainment of the end in view, he submits a project of law which, if passed, will have the effect of legalising, with certain modifications, and giving permanency to the present rate wherever a certain proportion of the inhabitants may be willing to continue it, and will facilitate the application of the system to other districts. The bill which he has proposed is based on the principle of the Municipal Act (XXVI of 1850). It deals in the first instance with the existing schools in the Godavery district, and provides for a course of procedure being adopted with regard to them somewhat different from that which will be adopted in the case of places where it may be proposed to establish new schools. It prescribes, in the one case, for the immediate enforcement of the Act, unless the majority of the inhabitants shall petition against it within a certain time. It prescribes, in the other case, that the Act shall not be enforced until the majority of the inhabitants have made an application to that effect. Mr. Arbuthnot recommends that in every case the rate shall be supplemented by a grant from the public Treasury under the grant-in-aid rules, so that only a moiety of the cost of each school will have to be paid by the ratepayers. The measure has received the approval of the collector and of the inspector of schools, as also of Mr. Taylor, the originator of the scheme which it is proposed to supersede.

The Government having given their best consideration to the measure, are of opinion that it is well worthy of a trial. It is on the one hand clearly impossible that the present rate can be much longer continued without the sanction of a legislative enactment. It is on the other hand very desirable that some plan should be sanctioned whereby as many as possible of the existing schools in the Godavery district, which in the words of the inspector's report, "have done, and are doing, a vast amount of good," may be continued without entailing any undue pressure on the people or involving the Government in a course of educational policy which is not capable of general application. The measure now proposed "furnishes," as Mr. Arbuthnot observes, "the most satisfactory means of solving the difficulty which has so long been felt in regard to maintaining the schools in the Godavery district. Wherever the inhabitants are sincere in their professed desire to maintain the schools, the Act will give them the means of doing so, and wherever the present rate is really in opposition to their wishes, it will be taken off. In other districts it will furnish a machinery for the establishment of schools of any grade, whenever there may be a desire for them, and while it provides for the permanency of the schools by means of local taxation, it will not be in any way incompatible with the extension of the grant-in-aid system, but, on the contrary, will aid the development of that system by giving a permanency to the local funds, in aid of which grants will be made, and which in the case of schools supported by natives does not at present exist. It may prove, like the Municipal Act, which has been taken as its model, to be altogether, or, in a great measure, a dead letter; but if it fails it can do no harm, and if it should succeed it will prove a very useful and simple means of promoting the diffusion of popular instruction."

To this it may be added that, if the measure should succeed, it will furnish the means of gradually superseding the present Government schools, and will enable the Government to carry out the policy indicated in the 62d* paragraph of the honourable Court of Directors' Despatch of July 1854, of confining its action in educational matters to grants-in-aid and inspection.

A BILL to provide for the maintenance of certain schools in the Delta Taluqs of the Godavery district, under the Presidency of Fort Saint George, and to enable the inhabitants of any town, or village, or circle of villages in any district under the said Presidency, to assess themselves for the establishment and maintenance of schools.

Whereas, in certain towns and villages, situated in the Delta Taluqs of the Godavery district, under the Presidency of Fort Saint George, schools for elementary instruction have been established and maintained by a rate imposed by the Revenue authorities, with the consent of the principal inhabitants of such towns and villages; and whereas there are no legal means of enforcing such rate, and it is expedient that provision should be made for the permanence of the said schools in those places in which a majority of the householders desire to maintain them, and to enable the inhabitants of such towns, villages or places, to assess themselves for the purpose; and whereas it is expedient that in other towns, villages, and places in the said Godavery district, as well as in the other districts subject to the Presidency of Fort Saint George, the inhabitants should be enabled to assess themselves for educational purposes, it is hereby enacted as follows:—

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* "We look forward to the time when any general system of education entirely provided by Government may be discontinued, with the gradual advance of the system of grants-in-aid, and when many of the existing Government Institutions, especially those of the higher order, may be safely closed, or transferred to the management of local bodies under the control of, and aided by, the State."

I. On the passing of this Act, the collector of the Godavery district shall give notice in the district gazette to the inhabitants of the towns and villages in which any school, or schools, supported by a rate, or subscription, may then be in operation, that if the majority of the inhabitants of any such town, or village, desire to discontinue the payment of the rate, or subscription, hitherto paid by them, they are at liberty to do so; and that on their notifying the same to the collector, the collection of the rate, or subscription, will be discontinued, and the school, or schools, will be closed; but that, if no application for this purpose be made within two months from the date of the publication of the collector's notice in the district gazette, it will be understood that the majority of the inhabitants are willing to pay a school rate, not exceeding the amount they have hitherto paid, and thereupon, the Inspector of schools for the division, and the deputy inspector for the district, and such number of the resident householders of the said town, village, or place, as the collector of the district may think necessary, shall be appointed School Commissioners for the purpose of assessing and collecting the rate, and managing the affairs of the school or schools, supported by it.

II. The Commissioners so appointed shall have the power to make rules, subject to the approval of the Director of Public Instruction for the Presidency of Fort Saint George, for the more effectual carrying out of the purposes for which they are appointed, which rules, when approved by the Director of Public Instruction, and until they are rescinded, or amended, as hereinafter provided, shall be of the same force within the said town, village, or place, as if they were inserted in this Act.

III. The rules to be prepared by the Commissioners shall provide, among other things, for—

(*a.*) The levy of taxes, or duties, in the town, village, or place, for the purposes of this Act, the amount of such taxes, or duties, the mode of collecting the same, and of ensuring the safety, and due application, of the money collected.

(*b.*) The appointment, remuneration, control, and dismissal of teachers, and of all other persons to be employed by the Commissioners under this Act.

(*c.*) The branches of learning to be taught, and the rules of discipline to be enforced in the schools under the Commissioners' control.

(*d.*) The manner in which, from time to time, the rules in force are to be amended or rescinded, provided that no such amendment, or rescission, shall take effect until approved by the Director of Public Instruction.

IV. The Commissioners for the time being shall have full power, subject to the rules so laid down, to hold lands, houses, and other property, and to expend and apply monies collected by them under this Act, in the establishment and maintenance of a school, or schools of secular learning, and the payment of teachers and other necessary servants, and to enter into all necessary contracts, and to bring, and defend, and compromise all suits, actions, and other legal proceedings, and to do all other things which may be necessary for the effectual carrying out of the purposes for which they are appointed.

V. No Commissioner shall be personally liable for any contract made by the Commissioners under this Act; but every Commissioner shall be liable for any misapplication of the monies collected to which he shall have been knowingly a party, or privy, or which shall have happened through his gross neglect of duty, and shall be liable to be sued for the same, as for money due to, and at the suit of, Her Majesty's Indian Government.

VI. The powers of Act II., 1839, shall be applied for the recovery of all arrears of taxes and duties due under this Act; and every magistrate shall put in force the powers of the said Act II. of 1839 for that purpose, whenever thereunto required by the Commissioners or their authorised agent.

VII. No tax or duty on property made under this Act, shall be defective for want of form; and it shall be enough in any such tax, or duty, on property, or any assessment of value for the purpose of making such tax, or duty, if the property rated, or assessed, shall be so described as to be generally known, and it shall not be necessary to name the owner or occupier thereof.

VIII. All moveable property found in any house, or building, or upon any land assessed under this Act, may be seized and sold by warrant of a magistrate for payment of any arrears of tax laid on such house, building, or land, under this Act.

IX. All Commissioners acting in execution of this Act shall, on or before, the last day in April in every year, make up and send to the Director of Public Instruction an account of all sums received and spent by them in the foregoing year, in such form and with such vouchers as the Director of Public Instruction shall, from time to time direct.

X. The inhabitants of any town, village, or place, in the said Godavery District, or in any other district subject to the Presidency of Fort Saint George, who may be desirous of making better provision for the establishment and maintenance of a school or schools, may apply to the collector of the district, specifying the nature of the school or schools required, and praying for an order that this Act shall be put in force in such town, village, or place.

XI. Whenever such an application shall be made to the collector of any district subject to this Presidency, notice thereof shall be given by advertisement in the district gazette,

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and also by proclamation of such town, village, or place, setting forth the purport and effect of the application, and allowing such reasonable time as may be fixed by the collector to enable the inhabitants of the town, village, or place, to forward petitions to the collector, for or, against, the enforcement of the Act therein.

XII. The collector shall duly consider all such petitions, and on the expiry of the time allowed for receiving the same, shall make an order which shall be published in the "Government Gazette," and also notified by public proclamation within such town, village, or place, &c., reciting that the application appears, or does not appear, as the case may be, to be approved by the inhabitants, either as regards the whole, or only part of such application; and if the application shall appear to be approved, either wholly, or in part, then declaring this Act to be in force in such town, village, or place, for such purposes and to such extent as shall appear to the said collector to be approved by the inhabitants.

XIII. Whenever such order shall be made and published as aforesaid, this Act shall come into force in the said town, village, or place, from the date of the publication of such order in the district gazette; and the publication of the said order shall be conclusive evidence that the provisions hereinbefore contained have been complied with, and that the Act is thenceforth in force for the purposes mentioned in the order.

XIV. The collector shall thereupon appoint the inspector of schools and the deputy inspector of schools for the district in which the town, village, or place, may be situate, and such number of the resident householders as he may think necessary, to be School Commissioners for the purpose of administering this Act, and the said School Commissioners shall have the powers, functions, and immunities, described in sections III, IV, V, VI, VII, VIII, IX, and X. of this Act.

XV. The Governor in Council may at any time suspend the operation of this Act in any town, village or place, and appoint any person, or persons to examine and report upon the behaviour of the Commissioners or any of them, or of their servants, in the execution of this Act.

XVI. The word "place," where it occurs in this Act, shall be construed to include any district, suburb, quarter, or number of villages, the inhabitants of which may combine in applying to the collector to have this Act put in force under one set of Commissioners for such district, suburb, quarter, or number of villages.

Appendix, No. XI.

Table (A.)—STATEMENT showing the present Average Rates of Wages and Allowances of Agricultural Labourers, Tradesmen, Artizans, and Domestic Servants.

1.—ORDINARY AGRICULTURAL LABOURERS.

WAGES PER MONTH.

Age.	New Emigrants.						Old Emigrants.			Remarks.
	1st Year.	2d Year.	3d Year.	4th and 5th Years.						
				Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	
	s.	s.	s.	s.	s.	s.	s.	s.	s.	
From 7 to 9 inclusive	2	4	6	2	6	4	4	8	6	The wages of ordinary agricultural labourers to be allotted in the Colony, and of those to be specially engaged in India during the present year, were fixed by His Excellency the Governor, according to law, on the 5th September 1860.
„ 10 to 12* „	3	5	7	3	7	5	7	11	9	
„ 13 to 16 „	6	8	10	6	10	8	11	14	12½	
„ 17 to 20 „	8	10	11	8	11	9½	12	18	15	
„ 21 upwards -	10	11	12	10	14	12	14	18	16	

RATIONS.

	Minimum.	Maximum.	Average.	Remarks.
	lbs. oz.	lbs. oz.	lbs. oz.	
Rice, per mensem - - - - - -	45 0	60 0	52 8	1. Two pounds of pounded maize, or two pounds and a half of cooked manioc, or five pounds of raw manioc, are given on some estates instead of rice. 2. Emigrants under 10 years of age receive half of these rations.
Dholl „ - - - - - -	2 0	4 0	3 0	
Salt fish „ - - - - - -	2 0	4 0	3 0	
Ghee or Oil „ - - - - - -	1 0	2 0	1 8	
Salt „ - - - - - -	1 0	2 0	1 8	

* Increased to four, six, and eight shillings.

2.—TRADESMEN, ARTIZANS, AND DOMESTIC SERVANTS.

WAGES PER MONTH.

	New Emigrants.						Old Emigrants.		
	First Three Years.			4th and 5th Years.					
	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.
	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.
Carpenters	- -	- -	- -	- -	- -	- -	2 -	4 -	3 -
Joiners	- -	- -	- -	- -	- -	- -	3 -	6 -	4 10
Cartwrights	- -	- -	- -	- -	- -	- -	2 -	4 -	3 -
Blacksmiths	- -	- -	- -	- -	- -	- -	3 -	6 -	4 10
Coopers	- -	- -	- -	- -	- -	- -	2 -	4 -	3 -
Tinsmiths	- -	- -	- -	- -	- -	- -	2 -	6 -	4 -
Farriers	- -	- -	- -	- -	- -	- -	2 -	4 -	3 -
Harness Makers	- -	- -	- -	- -	- -	- -	2 -	4 -	3 -
Painters and Glaziers	- -	- -	- -	- -	- -	- -	1 -	3 -	2 -
Masons	- -	- -	- -	- -	- -	- -	2 -	6 -	4 -
Stone Cutters	- -	- -	- -	- -	- -	- -	2 -	6 -	4 -
Sawyers	- -	- -	- -	- -	- -	- -	1 -	2 -	1 10
Timber Squarers	- -	- -	- -	- -	- -	- -	1 -	2 -	1 10
Tobacconists	- -	- -	- -	- -	- -	- -	1 -	2 -	1 10
Gardeners	- 10	- 16	- 13	- 12	- 18	- 15	- 12	1 -	- 16
Cooks	1 -	2 -	1 10	1 -	2 10	1 15	1 -	3 -	2 -
Table Servants	1 -	2 -	1 10	1 -	2 10	1 15	1 -	3 -	2 -
Coachmen	1 -	2 -	1 10	1 -	2 10	1 15	1 -	3 -	2 -
Grooms	- 10	1 -	- 15	- 12	1 12	1 2	- 14	1 16	1 5
Tailors	1 -	2 -	1 10	1 -	3 -	2 -	1 -	4 -	2 10
Washermen	1 -	2 -	1 10	1 -	2 -	1 10	1 -	2 -	1 10
Sailors	- -	- -	- -	1 -	2 -	1 10	1 -	4 -	2 10
Mill Drivers	- -	- -	- -	1 -	5 -	3 -	1 -	6 -	3 10
Sugar Makers	- -	- -	- -	1 -	5 -	3 -	1 -	6 -	3 10

RATIONS.

	Minimum.	Maximum.	Average.	Remarks.
	lbs. oz.	lbs. oz.	lbs. oz.	
Rice, per mensem	45 0	60 0	52 8	Extra pay is given by many employers instead of these rations.
Dholl „	4 0	6 0	5 0	
Salt fish „	4 0	6 0	5 0	
Ghee or Oil „	2 0	3 0	2 8	
Salt „	1 0	2 0	1 8	

Table B.—LIST of Emigrant Ships dispatched to the Mauritius, during the Official Year 1861–62.

Name of Ships.	Tonnage.	Date of Sailing.	Number of souls Embarked.	Number of Deaths.	Remarks.
Ship Myrtle	621	5 May 1861	309	—	
„ Mariner	683	11 May –	299	—	
„ Mount Stuart Elphinstone	611	9 June –	319	2	1 dysentery; 1 hermatemesis.
„ Emma Colvin	558	5 July –	251	—	
„ Truro	694	10 July –	343	4	Bronchitis, dysentery, &c.
Barque Defiance	512	13 July –	243	—	
Ship Mariner	683	21 July –	291	—	
„ Arethusa	942	1 Aug. –	380	19	2 drowned accidentally, and the others by cholera.
„ Edmundsbury	523	31 Aug. –	243	8	Diarrhœa and cholera, &c.
„ Raby Castle	691	12 Sept. –	344	5	Diarrhœa and dysentery.
„ Mount Stuart Elphinstone	611	19 Oct. –	330	2	Disease of the heart and peritonitis.
„ Sovereign of India	773	31 Oct. –	379	1	Dysentery.
„ Denmark	377	6 Dec. –	201	—	
„ Calliope	687	15 Dec. –	338	30	Cholera.
„ Eena	424	9 Jan. 1862	225	1	
„ Punjab	790	5 Feb. –	347	- -	Not received.
„ Sir Robert Sale	741	19 Feb. –	350	—	
„ Mount Stuart Elphinstone	611	27 March –	332	- -	Not received.
Barque Nonpareil	455	2 April –	244	- -	

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Madras.

TABLE (C.)—LIST of EMIGRANT SHIPS dispatched to the WEST INDIES, during the Official Year 1861-62.

SHIP'S NAME.	Tonnage.	Date of Sailing.	Number of Souls Embarked.	Number of Deaths.	Destination.	Remarks.
Ship Truro - - -	694	7 Nov. 1861	359	3	Demerara.	
„ Mariner - - -	683	20 Dec. 1861	318	No reports -	- ditto.	
„ Statesman - -	811	6 Mar. 1862	359		- ditto.	

TABLE (D.)—LIST of SHIPS arrived from the MAURITIUS with return EMIGRANTS, during the Official Year 1861-62.

SHIP'S NAME.	Tonnage.	Date of Arrival.	Number of Souls Embarked.	Number of Deaths.	Remarks.
Ship Mount Stuart Elphinstone -	611	19 Aug. 1861	166	1	
„ Mount Stuart Elphinstone -	611	6 Jan. 1862	198	2	
„ Eena - - - - -	424	21 April 1862	146	- none.	

TABLE (E.)—STATEMENT showing the Number of EMIGRANTS embarked to each COLONY, during the Official Year 1861-62.

Official Year.	Destination.	Men.	Women.	Boys.	Girls.	Infants.
1st May 1861 to 30th April 1862.	Mauritius - - -	3,569	1,284	403	304	208
1861-62 - - - -	Demerara - - -	551	247	96	97	45
	Trinidad - - -	None.	—	—	—	—
	St. Luicia - - -					
	St. Vincent - -					
	Natal - - -					

TABLE (F.)—LIST of SHIPS arrived from NATAL with return EMIGRANTS, during the Official Year 1861-62.

SHIP'S NAME.	Tonnage.	Date of Arrival.	Number of Souls Embarked.	Number of Deaths.	Remarks.
Barque Cataraqui - - - -	551	13 Feb. 1862	32	1	

Protector's Office, Madras,
29 May 1862.

(signed) *J. J. Franklin,*
Protector of Emigrants.

APPENDIX, No. XII.

(A.)—ACCOUNT of the Income and Expenditure of the Municipal Commission, for the Year ended 31 December 1861.

RECEIPTS.

	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Balance brought forward from last statement			2,05,989 – –	
Less amount transferred to account of unclaimed salaries, &c.			240 2 6	2,05,748 13 6
Assessment 1861 (declared)			1,41,115 14 7	
Wheel tax 1861 (declared)		39,931 4 –		
Wheel tax 1860 (fourth quarter)		13,699 8 –	53,830 12 –	
Assessment warrant fees			827 1 5	
Wheel tax warrant fees			241 1 6	
License fees			744 – –	
Fines			789 5 6	
Interest			2,539 13 4	
Slaughter-house fees			6,706 8 6	
Proceeds of rubbish sales			3,906 5 –	
Amount realised by sale of lands for improving roadways	4,906 6 8			
By sale of surplus ground and materials of buildings purchased for improving roads	4,077 8 1			
Ditto, for opening out new roads	1,410 12 6	10,394 11 3		
Ditto, on account of the Trevelyan Waterworks		1,040 12 7		
Ditto, on account of the Washermanpettah Cemetery		1,879 6 9	13,314 14 7	
Amount realised by sale of lamp-posts, &c.		417 13 7		
Amount recovered on account of globes, &c., broken		21 8 –		
Ditto, on account of private lights		26 7 –	465 12 7	
Amount realised by sale of old rubbish, carts, &c.			91 9 6	
Public contribution for watering the Mount Road			140 12 9	
Ditto, for improving the Mint Esplanade Burial Ground			70 – –	
Amount realised by the sale of the garden produce of burial and burning grounds			142 12 –	
Amount received from Government for the Washermanpettah Cemeteries		2,112 – –		
For repair of Government roads for 1860-61 (balance)	5,000 – –			
Ditto, for 1861-62 (in part)	20,000 – –			
For widening Pycroft's Road, Triplicane (in part)	20,000 – –	45,000 – –		
For constructing two latrines, at Royapooram		1,183 – –		
For cleaning the Government main drain		261 4 2		
For constructing Ladies Terrace and Band Stand on the South Beach	3,731 11 9			
Proceeds of the old materials of the former band stand	12 2 –	3,743 13 9	52,300 1 11	2,77,226 13 2
Rs.				4,82,975 10 8

DISBURSEMENTS.

	Supervision and Management.	Scavenging.	Lighting.	Printing and Advertising charges.	Purchase of Land and Buildings.	Additions.	Improvements.	Repairs.	Miscellaneous.		
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Assessment Department	7,489 4 7	–	–	325 4 10	–	–	–	–	55 4 6	7,869 13 11	
Assessor's Department	2,019 8 –	–	–	–	–	–	–	–	–	2,019 8 –	9,889 5 11
Books, maps, and other publications	–	–	–	–	–	–	–	–	39 7 8	–	39 7 8
Burial and burning grounds	–	–	–	–	2,604 10 –	4,472 8 1	–	–	470 2 –	–	7,547 4 1
Ditto, charges	8 2 –	–	–	295 – –	–	–	–	–	306 – 9	–	609 2 9
Civil Engineer's Department	7,444 – –	–	–	–	–	–	–	–	291 11 5	–	7,735 11 5
Compensations, law, and other extraordinary charges	–	–	–	–	–	–	–	–	76 8 –	–	76 8 –
Conservancy Department	2,995 9 1	–	–	27 4 6	–	–	–	–	2 – –	–	3,024 13 7
Flushing drains	553 12 5	–	–	–	–	–	–	–	–	–	553 12 5
Government works	–	–	–	–	–	–	3,497 2 –	–	–	–	3,497 2 –
Income tax	–	–	–	–	–	–	–	–	101 8 –	–	101 8 –
Interest	–	–	–	–	–	–	–	–	4,751 4 9	–	4,751 4 9
Lighting (charges)	–	–	5,999 7 4	–	–	–	–	–	–	5,999 7 4	
Lighting Department	–	–	1,155 – –	–	–	–	–	–	–	1,155 – –	7,154 7 4
Mortuary Department	888 – –	–	–	–	–	–	–	–	18 – –	–	906 – –
Municipal Department	21,892 2 3	–	–	–	–	–	–	4 8 6	55 1 6	–	21,951 12 3
Office Furniture	–	–	–	–	–	35 11 4	–	–	–	–	35 11 4
Office premises	–	–	–	–	–	–	–	–	138 14 3	–	138 14 3
Refunds of assessment	–	–	–	–	–	–	–	–	15 – –	–	15 – –
Refunds of wheel tax	–	–	–	–	–	–	–	–	2 4 –	–	2 4 –
Remissions, assessment	–	–	–	–	–	–	–	–	3,270 6 2	–	3,270 6 2
Remissions, wheel tax	–	–	–	–	–	–	–	–	2,786 3 –	–	2,786 3 –
Road Department	4,818 – –	–	–	–	–	–	–	–	–	–	4,818 – –
Roads, improvement to	–	–	–	–	13,114 3 5	–	2,285 11 6	–	–	15,399 14 11	
„ new	–	–	–	–	1,586 5 10	676 1 9	–	–	–	2,262 7 7	
„ repairs to	–	–	–	–	–	–	–	84,985 14 2	–	84,985 14 2	1,02,648 4 8
Scavenging (charges)	–	36,094 – –	–	–	–	–	–	–	–	36,094 – 7	
„ department	–	27,144 8 7	–	–	–	–	–	–	–	27,144 8 6	63,238 9 1
Slaughter-houses (charges)	2,742 7 8	–	–	–	–	–	–	–	186 5 9	–	2,928 13 5
Stationery	–	–	–	–	–	–	–	–	987 3 1	–	987 3 1
Sums recoverable	–	–	–	–	–	–	–	–	1,690 15 11	–	1,690 15 11
Trevelyan Waterworks	1,667 11 3	–	–	–	360 – –	56,537 14 10	–	–	–	58,565 10 1	
Trevelyan Waterworks (charges)	272 8 –	–	–	–	–	–	–	–	3,328 8 5	3,601 – 5	62,166 10 6
Watering	40 6 2	–	–	6 – –	–	–	–	46 – 3	1,711 15 1	–	1,804 5 6
Wheel Tax Department	4,981 10 9		–	135 12 –	–	–	–	–	151 8 –	–	5,268 14 9
Works, improvement to	–	–	–	–	–	–	4,526 10 1	–	–	4,526 10 1	
„ new	–	–	–	–	126 2 8	21,509 12 –	–	–	–	21,635 14 8	
„ repairs to	–	–	–	–	–	–	–	5,601 5 2	–	5,601 5 2	31,763 13 11
Rs.	57,813 2 2	63,238 9 1	7,154 7 4	789 5 4	17,791 5 11	83,232 – –	10,309 7 7	90,637 12 1	20,526 4 3		3,51,492 5 9

	Rs. a. p.	Rs. a. p.		
Balance to be carried to the credit of the Fund, 1862;				
Cash with the Bank of Madras	15,290 1 11			
Cash with store conicopoly	150 – –			
Cash with cashkeeper	100 – –	15,540 1 11		
Invested in Government securities		37,300 – –		
Arrears of assessment recoverable from ratepayers		39,979 10 4		
Arrears of wheel tax recoverable from ratepayers		10,848 12 –		
Advances recoverable from contractors and others		5,510 13 5		
Office premises		21,000 – –		
Lamp-posts, &c.		3,000 – –	1,33,179 5 8	
Less amount of unclaimed salaries, &c.		343 2 7		
Amount in deposit: Avenue fund	844 5 9			
Amount in deposit: Income tax deposits	506 4 7			
Amount in deposit: Assessment received in excess	2 3 10	1,352 14 2	1,696 – 9	1,31,483 4 11
Rs.				4,82,975 10 8

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(B.)—Statement showing the Actual Demand, Collection, Remission, and Balance on Account of Assessment, for the Year 1861.

	DEMAND.						COLLECTION.					
	1st Division.	2d Division.	3d Division.	4th Division.	5th Division.	Total.	1st Division.	2d Division.	3d Division.	4th Division.	5th Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Arrears anterior to 1860 -	545 9 4	505 2 11	264 – 1	1,869 13 10	2,911 5 2	6,095 15 4	253 13 1	269 9 2	109 2 6	688 9 3	1,059 14 3	2,381 – 3
Arrears of 1860 - - -	1,910 11 4	1,820 5 5	1,104 10 10	7,458 3 6	23,674 14 9	35,968 13 10	1,524 2 2	1,347 9 8	879 9 –	6,160 14 10	21,865 9 5	31,777 13 1
For the year 1861 - -	35,322 4 4	25,301 12 3	10,563 4 3	27,208 6 4	42,720 3 5	1,41,115 14 7	34,242 14 11	23,989 9 9	9,656 – 9	19,299 8 11	18,577 6 11	1,05,765 9 3
Total - - - Rs.	37,778 9 –	27,627 4 7	11,931 15 2	36,536 7 8	69,306 7 4	1,83,180 11 9	36,020 14 2	25,606 12 7	10,644 12 3	26,149 1 –	41,502 14 7	1,39,924 6 7

	REMISSION.						BALANCE.					
	1st Division.	2d Division.	3d Division.	4th Division.	5th Division.	Total.	1st Division.	2d Division.	3d Division.	4th Division.	5th Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Arrears anterior to 1860 -	163 12 4	115 11 11	39 9 10	481 15 10	725 4 11	1,526 6 10	127 15 11	119 13 10	115 3 9	699 4 9	1,126 2 –	2,188 8 3
Arrears of 1860 - - -	288 11 4	372 5 –	116 14 10	403 1 1	569 3 9	1,750 4 –	97 13 10	100 6 9	108 3 –	894 3 7	1,240 1 7	2,440 12 9
For the year 1861 - -	- - -	- - -	- - -	- - -	- - -	- -	1,079 5 5	1,312 2 6	907 3 6	7,908 13 5	24,142 12 6	35,350 5 4
Total - - - Rs.	452 7 8	488 – 11	156 8 8	885 – 11	1,294 8 8	3,276 10 10	1,305 3 2	1,532 7 1	1,130 10 3	9,502 5 9	26,509 – 1	39,979 10 4

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(C)—STATEMENT showing the Actual Demand, Collection, Remission, and Balance on account of Wheel Tax on Spring Vehicles and Animals in 1861.

—	DEMAND.														
	Balance on 31st December 1860.					Bills Issued in 1861.					Total Demand.				
	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	TOTAL.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	TOTAL.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	TOTAL.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Arrears of 1858 - - -	306 –	174 –	174 –	156 –	810 –	- -	- -	- -	- -	- -	306 –	174 –	174 –	156 –	810 –
Arrears of 1859 - - -	196 8	141 –	224 4	168 12	730 8	- -	- -	- -	- -	- -	196 8	141 –	224 4	168 12	730 8
Arrears of 1860 - - -	283 –	546 –	4,499 10	- -	5,328 10	9 –	22 8	123 12	11,436 –	11,591 4	292 –	568 8	4,623 6	11,436 –	16,919 14
For the year 1861 - - -	- -	- -	- -	- -	- -	11,463 12	10,887 8	10,513 8	22 8	32,887 4	11,463 12	10,887 8	10,513 8	22 8	32,887 4
TOTAL - - - Rs.	785 8	861 –	4,897 14	324 12	6,869 2	11,472 12	10,910 –	10,637 4	11,458 8	44,478 8	12,258 4	11,771 –	15,535 2	11,783 4	51,347 10

—	COLLECTION.					REMISSION.					BALANCE.				
	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	TOTAL.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	TOTAL.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	TOTAL.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Arrears of 1858 - - -	5 4	– 12	21 12	9 12	37 8	300 12	173 4	152 4	146 4	772 8	—	—	—	—	—
Arrears of 1859 - - -	3 12	13 8	18 –	45 –	80 4	- -	1 8	- -	- -	1 8	192 12	126 –	206 4	123 12	648 12
Arrears of 1860 - - -	126 12	371 4	4,361 10	10,852 8	15,712 2	- -	- -	24 12	302 4	327 –	165 4	897 4	237 –	281 4	880 12
For the year 1861 - - -	10,643 11	9,742 11	6,141 3	22 8	26,550 1	322 5	235 13	252 9	- -	810 11	497 12	909 –	4,119 12	- -	5,526 8
TOTAL - - - Rs.	10,779 7	10,128 3	10,542 9	10,929 12	42,379 15	623 1	410 9	429 9	448 8	1,911 11	855 12	1,232 4	4,563 –	405 –	7,056 –

(D.)—Sttaement showing the actual Demand, Collection, Remission, and Balance on account of Wheel Tax on Country Carts in 1861.

YEAR.	DEMAND.														
	Balance on 31st December 1860.					Bills Issued in 1861.					Total Demand.				
	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	Total.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	Total.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	Total.
	Rs. *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*
For the Year - - 1858	- -	171 12	329 4	389 4	890 4	- -	- -	- -	- -	- -	- -	171 12	329 4	389 4	890 4
" " - - - 1859	- -	72 –	265 8	340 8	678 –	- -	- -	- -	- -	- -	- -	72 –	265 8	340 8	678 –
" " - - - 1860	- -	575 4	1,887 –	- -	2,462 4	4 4	5 4	6 12	2,292 –	2,308 4	4 4	580 8	1,893 12	2,292 –	4,770 8
" " - - - 1861	- -	- -	- -	- -	- -	2,688 12	2,064 12	2,169 –	121 8	7,044 –	2,688 12	2,064 12	2,169 –	121 8	7,044 –
Total - - - *Rs.*	- -	819 –	2,481 12	729 12	4,030 8	2,693 –	2,070 –	2,175 12	2,413 8	9,352 4	2,693 –	2,889 –	4,657 8	3,143 4	13,382 12

YEAR.	COLLECTION.					REMISSION.					BALANCE.				
	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	Totl.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	Total.	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.	Total.
	Rs. *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*	*Rs.* *a.*
For the Year - - 1858	- -	3 –	6 –	6 12	15 12	- -	168 12	323 4	382 8	874 8	—	—	—	—	—
" " - - - 1859	- -	1 8	12 12	16 8	30 12	- -	- -	- -	- -	- -	- -	70 8	252 12	324 –	647 4
" " - - - 1860	4 4	420 12	1,474 8	1,773 –	3,672 8	- -	- -	- -	- -	- -	- -	159 12	419 4	519 –	1,098 –
" " - - - 1861	2,688 12	1,786 8	399 12	121 8	4,996 8	- -	- -	- -	- -	- -	- -	278 4	1,769 4	- -	2,047 8
Total - - - *Rs.*	2,693 –	2,211 12	1,893 –	1,917 12	8,715 8	- -	168 12	323 4	382 8	874 8	- -	508 8	2,441 4	843 –	3,792 12

Municipal Commissioner's Office,
Madras, 31 December 1861.

(signed) *T. E. Bell*, President.
B. Cardozo,
S. Jesudasen,
Municipal Commissioners for the
Town of Madras.

Appendix, No. XIII.

(A.)—Working Account, Government Telegraph Department, Madras Circle.

RETURN of Paid and Service Messages sent to, and received from, the various Telegraph Offices in the Madras Circl for the Financial Year ending 1862.

STATIONS.	Number of Messages.			Receipts on				Number of Messages sent by Natives.	Collection in Telegraph Stamps.	Cash Refunde on Account Errors and Dela
	Single.	Reptn.	Total.	Service.	Telegraph Service.	Private.	Total.			
				Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a.
Madras	18,357	429	18,786	10,112 3 9	1,362 10 –	31,947 6 6	43,422 4 3	3,801	6 – –	87 3
Mount	451	2	453	297 – 6	10 2 –	503 14 6	811 1 –	12	—	—
Vellore	480	–	480	127 2 –	13 10 –	553 5 –	694 1 –	129	5 – –	—
Bangalore	3,018	71	3,089	717 2 6	28 5 –	3,112 12 –	3,858 3 6	401	– – –	2 –
Seerah*	62	–	62	1 7 –	6 10 –	88 4 –	96 5 –	27	—	—
Bellary	1,290	–	1,290	313 14 –	24 15 –	1,479 8 –	1,818 5 –	326	4 7 –	—
Mysore	946	–	946	47 8 –	15 7 –	1,506 4 –	1,569 3 –	383	– – –	12 –
Ootacamund	2,722	3	2,725	1,415 15 –	18 11 –	3,963 12 6	5,398 6 6	203	46 – –	5 8
Mercara	810	–	810	152 7 –	14 8 –	1,166 14 –	1,333 13 –	192	938 3 –	—
Cannanore	2,094	31	2,125	321 15 –	18 3 –	3,847 7 –	4,187 9 –	874	95 13 –	—
Calicut	2,640	11	2,651	497 1 –	20 4 –	4,918 8 6	5,435 13 6	1,133	2 – –	—
Cochin	3,446	139	3,585	96 2 6	12 14 –	8,096 11 6	8,205 12 –	1,641	– – –	8 –
Pondicherry	3,511	14	3,525	70 – –	28 1 –	6,453 1 6	6,551 2 6	588	—	—
Karikal	572	–	572	6 14 –	13 14 –	993 1 –	1,013 13 –	301	—	—
Negapatam	1,571	1	1,572	221 3 –	23 15 –	2,162 13 3	2,407 15 3	869	3 8 –	—
Total	41,970	701	42,671	14,397 15 3	1,612 1 –	70,793 11 3	86,803 11 6	10,880	1,100 15 –	114 11

* Closed in March 1862.

(B.)—Statement showing the Amount of Disbursements during the Year 1861-62.

Salary.	House Rent.	Contingencies.	Total.	Remarks.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
1,26,730 10 5	9,636 – –	36,643 5 10	1,73,016 – 3	

(signed) *George J. Moberly,*
Superintendent of G. T., Madras Circle.

Superintendent's Office, Madras,
18 June 1862.